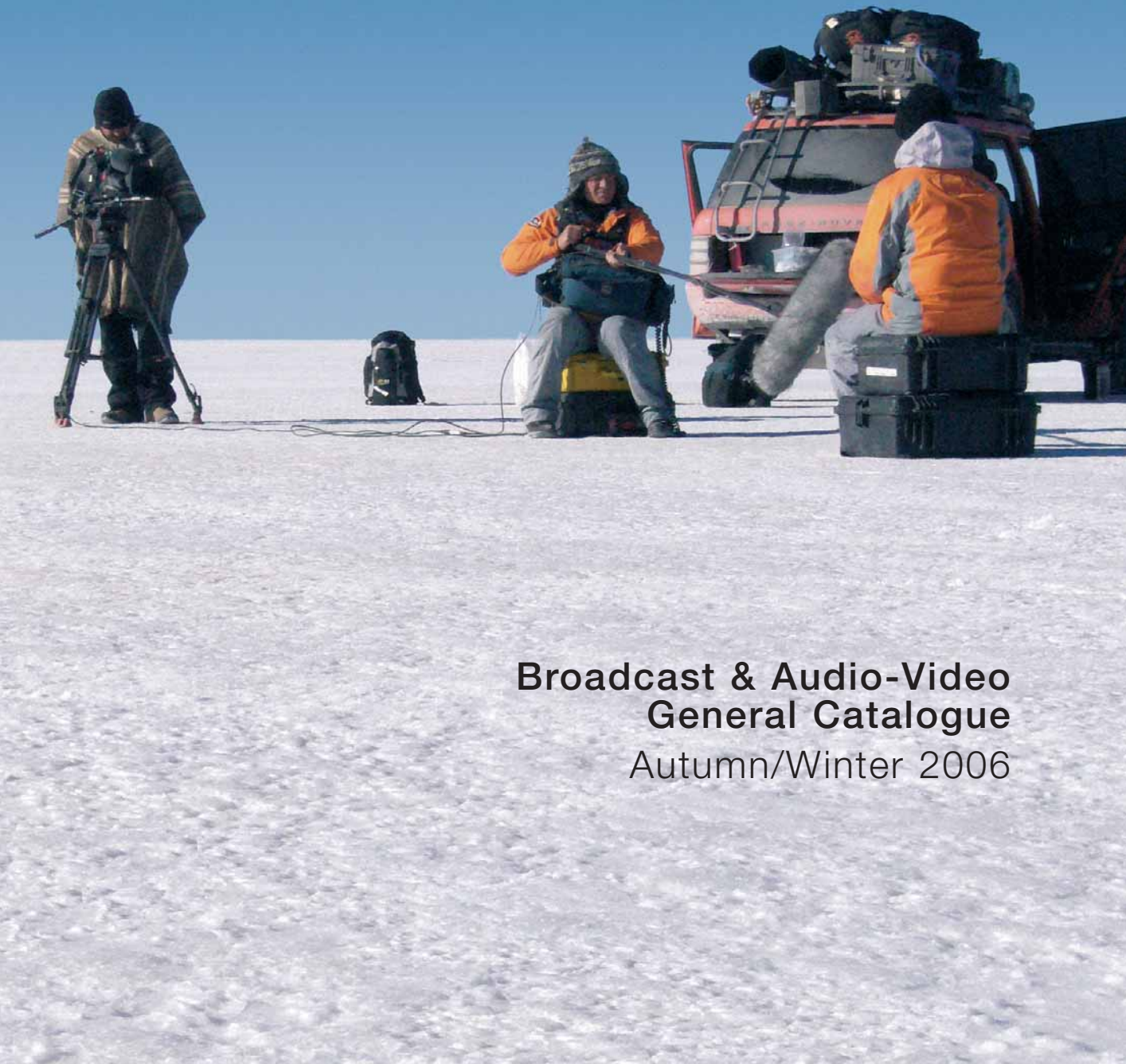


SONY®



**Broadcast & Audio-Video
General Catalogue**
Autumn/Winter 2006



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Broadcast & Audio-Video General Catalogue

Autumn/Winter 2006

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HDC-X300 HD Multi-purpose Camera

HDC-X300K

Features

- Superb picture quality with three 1/2-inch type 1.5-mega pixel HD CCDs
- Low smear level of -120 dB
- High signal-to-noise ratio of 54 dB
- Progressive scan mode (29.97/25/23.976PsF)
- Interlaced scan mode (59.94i/50i)
- Compact and lightweight design - only 1.2 kg (2 lb 10 oz)
- Low minimum illumination of 0.003 lx (+48 dB gain, 64 frames slow shutter)
- HD-SDI interface
- D-sub 15-pin interface
- Camera remote control capability
- Trigger function
- Optical ND filter and electronic CC function
- HDC-X300K is supplied with focus servo lens



Supplied Accessories

- Operation manual (1)
- AC adaptor (1)
- AC cable (1)
- Tally unit (1)

Optional Accessories

- HFU-X310 Interface unit
- HFBK-HD1 HD-SDI Option
- HFBK-SD1 SDI Option
- HFBK-XG1 XGA Option
- HFBK-TS1 iLink (HDV) Option
- RM-B150 Remote Control Unit
- RM-B750 Remote Control Unit
- RCP-750 Remote Control Panel (Joystick type)
- RCP-751 Remote Control Panel (Dial control type)
- MSU-700A Master Setup Unit
- MSU-750 Master Setup Unit
- VCT-U14 Tripod Adaptor



Specifications

General

- Power requirements:
 - DC 12 V
- Power consumption:
 - 17 W
- Operating temperature:
 - Camera: -10 to +45 °C (14 to 113 °F)
 - AC adaptor: 0 to 40 °C (32 to 104 °F)
- Storage temperature:
 - 20 to +60 °C (-4 to +140 °F)
- Operating humidity:
 - 25 to 85% (relative humidity)
- Mass:
 - 1.2 kg (2 lb 10 oz)
- Dimensions:
 - 95 x 95 x 160 mm (3 3/4 x 3 3/4 x 6 3/8 inches) without projection

Camera

- Pickup device:
 - 3-chip 1/2-inch type 1.5-mega pixel CCD
- Effective picture elements (H x V):
 - 1440 x 1080
- Optical system:
 - F1.4 prism
- Built-in filters:
 - 1:Clear, 2:1/4ND, 3:1/16 ND, 4:1/64ND
- Lens mount:
 - Sony 1/2-inch bayonet mount

Signal system:

- 59.94i/23.976PsF/29.97PsF selectable at 59.94i mode
- 50i/25PsF selectable at 50i mode
- Sync system:
 - Internal and external (3 state/VBS (BB))
- Minimum illumination:
 - 0.003 lx (F1.4, +48 dB gain, 64-frame accumulation)
- Sensitivity (2000 lx, 89.9% reflectance):
 - F10 (typical)
- Gain selection:
 - 3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB
- Shutter speed:
 - 1/60 (50i mode), 1/100, 1/250, 1/500, 1/1000, 1/2000 s
- Clear scan:
 - 50 to 200 Hz (50i mode)
 - 60 to 200 Hz (59.94i mode)
- Slow shutter:
 - 2, 3, 4, 5, 6, 7, 8, 16, 32, 64 frame
- Smear level:
 - 120 dB (typical)
- S/N ratio:
 - 54 dB (typical)
- Registration:
 - 0.02 or less (all zones, without lens)
- Geometric distortion:
 - Below measurable level (without lens)
- Modulation depth at 20 MHz:
 - 45% (typical)

Signal input

- Genlock video:
 - BNC x1, 1.0 Vp-p, 75 Ω

Signal outputs

- HD SDI:
 - BNC x1, 0.8 Vp-p +/-10%, 75 Ω

Video:

- D-sub 15-pin

Tally:

- Mini-jack

Other inputs/outputs

- Trigger:
 - BNC x1
- Lens:
 - 14-pin
- Remote:
 - 8-pin
- DC input:
 - DC jack

Eco-info

- Lead-free solder is used for soldering.
- Halogenated flame retardants are not used in the printed wiring boards.

HDC-X310 HD Multipurpose camera with Fibre interface

HDC-X310K

Features

Features are similar to HDC-X300. HD-SDI Interface is replaced by a long distance capable monomode fibre interface allowing up to 1Km connection with a simple fibre network cable. HDC-X310K is supplied with 19X autofocus Lens.

Supplied Accessories

Operation manual (1)
AC adaptor (1)
AC cable (1)
Tally unit (1)

Optional Accessories

RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control type)
MSU-700A Master Setup Unit
MSU-750 Master Setup Unit
VCT-U14 Tripod Adaptor
HFU-X310 Interface unit
HFBK-HD1 HD-SDI Option
HFBK-SD1 SDI Option
HFBK-XG1 XGA Option
HFBK-TS1 iLink (HDV) Option

Specifications

General

Power requirements:
DC 12 V
Power consumption:
17 W
Operating temperature:
Camera: -10 to +45 °C (14 to 113 °F)
AC adaptor: 0 to 40 °C (32 to 104 °F)
Storage temperature:
-20 to +60 °C (-4 to +140 °F)
Operating humidity:
25 to 85% (relative humidity)
Mass:
1.2 kg (2 lb 10 oz)
Dimensions:
95 x 95 x 160 mm (3 3/4 x 3 3/4 x 6 3/8 inches) without projection
Camera
Pickup device:
3-chip 1/2-inch type 1.5-mega pixel CCD
Effective picture elements (H x V):
1440 x 1080
Optical system:
F1.4 prism
Built-in filters:
1:Clear, 2:1/4ND, 3:1/16 ND, 4:1/64ND
Lens mount:
Sony 1/2-inch bayonet mount
Signal system:
59.94i/23.976PsF/29.97PsF selectable at 59.94i mode
50i/25PsF selectable at 50i mode
Sync system:
Internal and external (3 state/VBS (BB))

Minimum illumination:
0.003 lx (F1.4, +48 dB gain,
64-frame accumulation)
Sensitivity (2000 lx, 89.9%
reflectance):
F10 (typical)
Gain selection:
-3, 0, 3, 6, 9, 12, 18, 24, 30, 36,
42, 48 dB
Shutter speed:
1/60 (50i mode), 1/100, 1/250,
1/500, 1/1000, 1/2000 s
Clear scan:
50 to 200 Hz (50i mode)
60 to 200 Hz (59.94i mode)
Slow shutter:
2, 3, 4, 5, 6, 7, 8, 16, 32, 64 frame
Smear level:
-120 dB (typical)
S/N ratio:
54 dB (typical)
Registration:
0.02 or less (all zones, without lens)
Geometric distortion:
Below measurable level (without lens)
Modulation depth at 20 MHz:
45% (typical)
Signal input
Genlock video:
BNC x1, 1.0 Vp-p, 75 Ω



Signal outputs

Fibre Interface Monomode, LC Duplex type
Video:
D-sub 15-pin
Tally:
Mini-jack

Other inputs/outputs

Trigger:
BNC x1
Lens:
14-pin
Remote:
8-pin
DC input:
DC jack

Eco-info

Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the printed wiring boards.

HDC-1000 Multi-format HD Camera

Features

- Newly developed three 2/3-inch type 2.2-megapixel HD progressive CCD
- High-sensitivity of F10
- Excellent signal-to-noise ratio of 54 dB
- A wide variety of capturing modes - 1080/50i, 1080/60i, 1080/24P, 1080/25P, 1080/30P, 720/50P, 720/60P
- Industry-first 14-bit A/D conversion
- State-of-the-art DSP LSI
- Ergonomic design
- Optical fibre digital transmission
- Memory Stick storage of camera setup parameters
- Servo-controlled ND and CC filters

Supplied Accessories

- Operation manual (1)
- Front cover (1)
- Number plate for side panel (2)
- Belt for cable clamp (2)
- Angle adjustment fitting (2)

Optional Accessories

- HDCU-1000 Camera Control Unit
- HDCU-1500 Camera Control Unit
- HDTX-100 HD Triax Adaptor (Fischer type)
- MSU-900 Master Setup Unit
- MSU-950 Master Setup Unit
- CNU-700 Camera Command Network Unit
- HDVF-700A 7-inch Type HD B/W CRT Viewfinder
- HDVF-C730W Multi-format HD Colour LCD Viewfinder
- HDVF-9900 9-inch Type HD Colour CRT Viewfinder
- BKP-7911 Script Holder

Specifications

General

Mass

Approx. 20 kg (44 lb 9 oz,
without VF and lens)

Operating temperature

-20 to +45 °C (-4 to +113 °F)

Camera

Pickup device

3-CCD 2/3-inch type 16:9

Effective picture elements (H x V)

1920 x 1080

Spectrum system

F1.4 prism system

Built-in filters

1: Clear, 2: 1/4ND, 3: 1/8ND, 4: 1/16ND,
5: 1/64ND
A: CROSS, B: 3200K, C: 4300K, D: 6300K,
E: 8000K

Servo filter control

Yes

Lens mount

Sony hanger mount

Sensitivity

F10 at 2000 lx (3200K, 89.9% reflectance)

Minimum illumination

10 lx (F1.4, +12 dB gain up)

Signal-to-noise ratio

54 dB (typical)

Horizontal resolution

1000 TV lines

Dynamic range (1080/60i mode)

600%

Registration

Within 0.02% (all zones, without lens)

Shutter speed selection

1/100, 1/125, 1/250, 1/500, 1/1000,
1/2000 s (1080/60i mode), 1/60, 1/125,
1/250, 1/500, 1/1000, 1/2000 s
(1080/50i mode)

Modulation depth

45% or more horizontally (800 TV lines at
center, 27.5 MHz, with typical lens)

Input connectors

Audio in (CH-1)

XLR-3-31 type (1, female),
mic or line selectable

Audio in (CH-2)

XLR-3-31 type (1, female), AES/EBU or mic
or line selectable

Return control

6-pin (1)

DC in

XLR-4-pin type (1)

Output connectors

Test out

BNC type (1), 1.0 Vp-p, 75Ω

HD SDI out

BNC type (2)

DC out

4-pin (1), 10.5 to 17 V max. 1.5 A

AC utility out

Yes (Output connector differs by region.)

Input/output connectors

CCU

Optical fibre connector

Lens

36-pin

Viewfinder

D-sub 25-pin

Remote

8-pin

Prompter

BNC type (1), 1.0 Vp-p, 75Ω

Tracker

10-pin: Tracker R/T, R/G Tally,
unregulated 12 V

Crane

12-pin, Y/Pb/Pr, Trunk data I/O, Serial Data

Intercom

XLR-5-pin (2, female)



HDC-1000 rear panel



HDC-1500 Multi-format HD Camera

Features

- Newly developed three 2/3-inch type 2.2-megapixel HD progressive CCD
- High-sensitivity of F10
- Excellent signal-to-noise ratio of 54 dB
- A wide variety of capturing modes - 1080/50i, 1080/60i, 1080/24P, 1080/25P, 1080/30P, 720/50P, 720/60P
- Industry-first 14-bit A/D conversion
- State-of-the-art DSP LSI
- Ergonomic design
- Compact and lightweight: approx. 4.5 kg (9 lb 14 oz)
- Optical fibre digital transmission
- Versatile interfaces: two HD-SDI outputs, one digitally down-converted SD-SDI output
- Memory Stick storage of camera setup parameters
- Servo-controlled ND and CC filters

Supplied Accessories

Operation manual (1)
 Lens cap (1)
 Label for assignable switch (1)

Optional Accessories

HDCU-1000 Camera Control Unit
 HDCU-1500 Camera Control Unit
 HDVF-20A 2-inch Type HD B/W CRT Viewfinder
 HDLA-1500 Large Lens Adaptor
 HDVF-C30W Multi-format HD Colour LCD Viewfinder
 HDLA-1505 Large Lens Adaptor
 HDVF-C950W LCD Colour Viewfinder
 HKC-T1500 CCD Block Extension Adaptor
 HDVF-C730W LCD Colour Viewfinder
 MSU-900 Master Setup Unit
 MSU-950 Master Setup Unit
 CNU-700 Camera Command Network Unit
 CAC-6 Return Video Selector
 CAC-12 Camera Microphone Holder
 VCT-14 Tripod Adaptor
 HDTX-100 HD Triax Adaptor (Fischer type)

Specifications

General

Mass

Approx. 4.5 kg (9 lb 14 oz,
 without VF and lens)

Operating temperature
 -20 to +45 °C (-4 to +113 °F)

Camera

Pickup device

3-CCD 2/3-inch type 16:9

Effective picture elements (H x V)
 1920 x 1080

Spectrum system

F1.4 prism system

Built-in filters

1: Clear, 2: 1/4ND, 3: 1/8ND, 4: 1/16ND,
 5: 1/64ND
 A: CROSS, B: 3200K, C: 4300K, D: 6300K,
 E: 8000K

Servo filter control

Yes

Lens mount

Sony bayonet mount

Sensitivity

F10 at 2000 lx (3200K, 89.9% reflectance)

Minimum illumination

10 lx (F1.4, +12 dB gain up)

Signal-to-noise ratio

54 dB (typical)

Horizontal resolution

1000 TV lines

Dynamic range (1080/60i mode)

600%

Registration

Within 0.02% (all zones, without lens)

Shutter speed selection

1/100, 1/125, 1/250, 1/500, 1/1000,
 1/2000 s (1080/60i mode), 1/60, 1/125,
 1/250, 1/500, 1/1000, 1/2000 s
 (1080/50i mode)

Modulation depth

45% or more horizontally (800 TV lines
 at center, 27.5 MHz, with typical lens)

Input connectors

Audio in (CH-1)

XLR-3-31 type (1, female),
 mic or line selectable

Audio in (CH-2)

XLR-3-31 type (1, female), AES/EBU or
 mic or line selectable

Mic in (front)

XLR-3-31 type (1, female)

Return control

6-pin (1)

DC in

XLR-4-pin type (1)

Output connectors

Test out

BNC type (1), 1.0 Vp-p, 75Ω

HD SDI out

BNC type (2)

Earphone out

Mini-jack (1), 8Ω

DC out

4-pin (1), 10.5 to 17 V max. 1.5 A

Input/output connectors

CCU

Optical fibre connector

Lens

12-pin

Viewfinder

20-pin

Remote

8-pin

Prompter

BNC type (1), 1.0 Vp-p, 75 Ω

Tracker

10-pin: Tracker R/T, R/G Tally,
 unregulated 12 V

Crane

12-pin, Y/Pb/Pr, Trunk data I/O, Serial Data

Intercom

XLR-5-pin (2, female)



HDC-1500 rear panel

HDC-1550 Multi-format HD Camera (triax type)

Features

- Newly developed three 2/3-inch type 2.2-megapixel HD progressive CCD
- High-sensitivity of F10
- Excellent signal-to-noise ratio of 54 dB
- A wide variety of capturing modes - 1080/50i, 1080/24P, 1080/25P, 1080/30P, 1080/60P, 720/50P, 720/60P
- Industry-first 14-bit A/D conversion
- State-of-the-art DSP LSI
- Ergonomic design
- Built-in triax interface. Note that HDFX-100 triax to fibre convertor must be used with HDCU-1000/1500
- Memory Stick storage of camera setup parameters
- Servo-controlled ND and CC filters

Supplied Accessories

Operation manual (1)
Front cover (1)
Number plate for side panel (2)
Belt for cable clamp (2)
Angle adjustment fitting (2)

Optional Accessories

HDCU-1000 Camera Control Unit
HDCU-1500 Camera Control Unit
HDLA-1500 Large Lens Adaptor
HDLA-1505 Large Lens Adaptor
HDVF-C950W LCD Colour Viewfinder
HKC-T1500 CCD Block Extension Adaptor
HDTX-100 HD Triax Adaptor (Fischer type)
HDFX-100 Triax adaptor (Fischer type)
MSU-900 Master Setup Unit
MSU-950 Master Setup Unit
CNU-700 Camera Command Network Unit
HDVF-C730W Multi-format HD Colour LCD Viewfinder



HDC-1550 rear panel

Specifications

General

Mass
Approx. 4.5 kg (9 lb 14 oz,
without VF and lens)
Operating temperature
-20 to +45 °C (-4 to +113 °F)

Camera

Pickup device
3-CCD 2/3-inch type 16:9
Effective picture elements (H x V)
1920 x 1080
Spectrum system
F1.4 prism system
Built-in filters
1: Clear, 2: 1/4ND, 3: 1/8ND, 4: 1/16ND,
5: 1/64ND
A: CROSS, B: 3200K, C: 4300K, D: 6300K,
E: 8000K
Servo filter control
Yes
Lens mount
Sony bayonet mount
Sensitivity
F10 at 2000 lx (3200K, 89.9% reflectance)
Minimum illumination
10 lx (F1.4, +12 dB gain up)
Signal-to-noise ratio
54 dB (typical)

Horizontal resolution
1000 TV lines
Dynamic range (1080/60i mode)
600%
Registration
Within 0.02% (all zones, without lens)
Shutter speed selection
1/100, 1/125, 1/250, 1/500, 1/1000,
1/2000 s (1080/60i mode), 1/60, 1/125,
1/250, 1/500, 1/1000, 1/2000 s
(1080/50i mode)
Modulation depth
45% or more horizontally (800 TV lines
at center, 27.5 MHz, with typical lens)

Input connectors

Audio in (CH-1)
XLR-3-31 type (1, female),
mic or line selectable
Audio in (CH-2)
XLR-3-31 type (1, female), AES/EBU or
mic or line selectable
Mic in (front)
XLR-3-31 type (1, female)
Return control
6-pin (1)
DC in
XLR-4-pin type (1)

Output connectors

Test out
BNC type (1), 1.0 Vp-p, 75Ω
HD SDI out
BNC type (2)
Earphone out
Mini-jack (1), 8Ω
DC out
4-pin (1), 10.5 to 17 V max. 1.5 A

Input/output connectors

CCU
Optical fibre connector
Lens
12-pin
Viewfinder
20-pin
Remote
8-pin
Tracker
10-pin: Tracker R/T, R/G Tally,
unregulated 12 V
Crane
12-pin, Y/Pb/Pr, Trunk data I/O, Serial Data
Intercom
XLR-5-pin (2, female)

HDC-3300 HD Super Motion Colour Camera

Features

- Three times the normal frame rate of 1080/180i (59.94i) and 1080/150i (50i) and 1280 x 720 HD images at three times the normal frame rate of 720/180p (59.94p) and 720/150p (50p) •Long-distance optical fibre transmission
- High-quality normal-speed HD images •Flexible system configuration compatible with other Sony broadcast camera peripherals including the RCP-700 Series remote controllers, CNU-700 network command units and MSU-900/950 master setup units.

Supplied Accessories

Operation manual (1)

Optional Accessories

HDCU-3300 HD Super Motion Camera Control Unit

HDLA-1500 Large Lens Adaptor

HDLA-1505 Large Lens Adaptor



Specifications

General

Imaging Device

3-CCD 2/3 inches

Effective picture elements (H x V)

1920x1080

Mass

4.9Kg (10 lb 13 oz) (without VF and lens)

Dimensions (W x H x D)

173 x 197 x 350 mm

(6 7/8 x 7 7/8 x 13 7/8 inches)

Operation temperature

-20 °C to +45 °C (-4 °F to +113 °F)

Storage temperature

-20 °C to +60 °C (-4 °F to +140 °F)

Filter

Built-in filters

1: CLEAR, 2: 1/4ND, 3: 1/8ND, 4: 1/16ND,

5: 1/64ND

A: CROSS, B: 3200K, C: 4300K, D: 6300K,

D: 8000K

Sensitivity

F7 at 2000 lx (3200K, 89.9% reflectance)*

Signal-to-noise ratio

50 dB (typical)*

Horizontal resolution

1000 TV lines*

Modulation depth

45% (800 TV lines at center,

27.5 MHz, with typical lens)*

Input/Output connectors

DC 12V Output (max.1.5A)

4pin (1)

Remote

8pin (1)

DC 12V Input

XLR-4-pin type (1)

Viewfinder

20pin (1)

Lens

12pin (1)

Front Mic input

XLR-3-pin type (1)

Audio 1 input

XLR-3-pin type (1), (Mic or Line)

Audio 2 input

XLR-3-pin type (1),

(AES/EBU or Mic or Line)

Intercom 1

XLR-5-pin type (1)

Intercom 2

XLR-5-pin type (1)

HD-SDI output

BNC type (1): HD-SDI or SD-SDI, character on/off selectable**

Test output

BNC type (1): VBS(SD), VF Y or R or G or B (HD)

RET Control

6pin (1)

Tracker

10pin (1): Tracker R/T, R/G Tally, Unreg12V

Prompter

BNC type (1)

Crane

12pin (1):Y/Pb/Pr, Trunk Data I/O, Serial Data

Earphone

Minijack (1), 8 Ω

* At 1080/180i mode ** When the HDC-3300 camera is not connected to the HDCU-3300 camera control unit, the output signal from the HD-SDI connector is for maintenance purposes only.

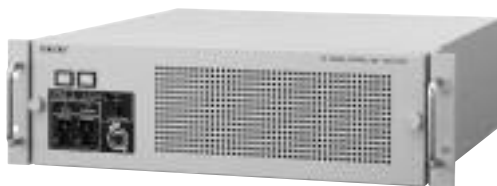
HDCU-1000 Camera Control Unit

Features

- Eight HD-SDI or SD-SDI outputs
- Up to eight additional HD-SDI or SD-SDI outputs (with two optional HKCU-1005 boards)
- Four sets of HD-SDI, SD-SDI, and analogue composite return video inputs
- Built-in down-converted analogue composite output
- Two-channel teleprompter input
- Built-in Ethernet interface (100Base-T)
- Utility power output capability for use with the HDC-1000 or HDLA-1500
- Two-channel data trunk lines (RS-422A or RS-232C) for easy data transmission
- AES/EBU digital audio output
- Two-channel microphone output (two XLR connectors)

Optional Accessories

HKCU-1001 SD Analogue Interface Unit
 HKCU-1003 Multi Interface Unit
 HKCU-1005 HD/SD Expansion Unit
 RCP-700 Remote Control Panel (Joystick Type)
 RCP-701 Remote Control Panel (Dial Control Type)
 RCP-750 Remote Control Panel (Joystick type)
 RCP-751 Remote Control Panel (Dial control type)
 MSU-900 Master Setup Unit
 MSU-950 Master Setup Unit
 RM-B150 Remote Control Unit
 RM-B750 Remote Control Unit
 CCA-5 Cables 8-pin/8-pin Remote Control Cable



HDCU-1000 rear panel

Applicable Models

HDC-1500 Multi-format HD Camera
 HDC-1000 Multi-format HD Camera

Specifications

General

Power requirements
 AC 100/120/220 to 240 V, 50/60 Hz
 Maximum current consumption
 5.4 A (at 100 V AC, entire system active)
 Operating temperature
 +5 to +40 °C (+41 to +104 °F)
 Mass
 Approx. 16 kg (35 lb 4 oz)
 Dimensions (W x H x D)
 424 x 133 x 410 mm
 (16 3/4 x 5 1/4 x 16 1/4 inches)

HD inputs/outputs

HD SDI output (*1)
 BNC type (4), SMPTE 292M, 1080/50i, 60i, 30P, 25P, 24P, 720/60P, 50P
 HD SDI/SD SDI selectable
 HD monitor output (*2)
 BNC type (4), SMPTE 292M, 1080/50i, 60i, 30P, 25P, 24P, 720/60P, 50P
 HD SDI/SD SDI selectable, character on/off selectable
 HD SDI return input
 BNC type (4), SMPTE 292M, 1080/50i, 60i, 30P, 25P, 24P, 720/60P, 50P

SD inputs/outputs

SDI output (*1)
 BNC type (4), SMPTE 259M, Serial digital component
 HD SDI/SD SDI selectable

SDI monitor output (*2)
 BNC type (4), SMPTE 259M, Serial digital component, 480/576-lines
 HD SDI/SD SDI selectable, character on/off selectable
 Analogue composite monitor output
 BNC type (1), character on/off selectable
 SDI return input
 BNC type (4), SMPTE 259M, Serial digital component
 VBS return input
 BNC type (4), NTSC/PAL

Sync

Reference input
 BNC type (1, with loop-through), HD tri-level sync or SD black burst
 Sync output
 BNC type (1), HD tri-level sync or SD sync

Intercom/Tally/PGM

Intercom PD & ENG
 D-sub 25-pin (1), 4W/RTS/CC selectable
 PGM1/PGM2
 0/-20 dBu selectable
 R-Tally/G-Tally
 24 V power in/make contact

Audio

MIC1/MIC2 output
 XLR-3-31 type (2, female), 0/-20 dBu selectable
 Digital audio output (AES/EBU)
 BNC type (1), AES/EBU format, 20-bit/48 kHz
 Embedded audio
 Embedded audio to HD SDI/SD SDI

Prompter

Prompter in
 BNC type (2, with loop-through), Analogue, NTSC/PAL/HD-Y

Others

RCP/MSU/CNU interface
 8-pin (1), Sony Camera Command Network Protocol (for entire camera system control)
 Ethernet
 RJ-45 (1), 10BASE-T/100BASE-TX
 Mic remote
 D-sub 15-pin
 WF mode
 4-pin (2), Stair step (for SD composite Waveform monitor)
 WF control
 D-sub 15-pin (1), GPI (for SDI component WF control)
 System expansion I/O
 D-sub 15-pin (1), GPI (for system control with external GPI interface)
 Trunk line
 D-sub 9-pin (1), RS-232C (remote line for CHU equipment), 12-pin (round type connector), RS-232C/422 (remote line for CHU equipment)
Camera
 Optical fibre cable interface
 SMPTE 304M based optical fibre connector (1), 1.5 gb/s optical fibre digital transmission, SMPTE 292 M

(*1) HD SDI output and SD SDI output share the same connector. (*2) HD monitor output and SD monitor output share the same connector.

HDCU-1500 Camera Control Unit

Features

- High power supply capability allowing HDC-1000 camera or HDC-1500/HDLA-1500 operation
- Three HD-SDI or SD-SDI outputs
- Up to eight additional HD-SDI or SD-SDI outputs (requires two optional HKCU-1005 boards)
- Three HD-SDI, SD-SDI, or analogue composite return video inputs
- Built-in down-converted analogue composite output
- RM-B750 Remote Control Unit attach capability on the front panel
- One channel teleprompter input
- Built-in Ethernet interface (100Base-T)
- Two-channel data trunk line(RS-422A/RS-232C) for easy data transmission
- Two-channel microphone output (two XLR connectors)

Optional Accessories

HKCU-1001 SD Analogue Interface Unit
 HKCU-1003 Multi Interface Unit
 HKCU-1005 HD/SD Expansion Unit
 RCP-700 Remote Control Panel
 (Joystick Type)
 RCP-701 Remote Control Panel
 (Dial Control Type)
 RCP-750 Remote Control Panel
 (Joystick type)
 RCP-751 Remote Control Panel
 (Dial control type)
 MSU-900 Master Setup Unit
 MSU-950 Master Setup Unit
 RM-B150 Remote Control Unit
 RM-B750 Remote Control Unit
 CCA-5 Cables 8-pin/8-pin Remote Control Cable

Specifications

General

Power requirements
 AC 100 to 240 V, 50/60 Hz
 Maximum current consumption
 4 A (at 100 V AC, entire system active)
 Operating temperature
 -10 to +40 °C (+14 to +104 °F)
 Mass
 Approx. 6.2 kg (13 lb 10 oz)
 Dimensions (W x H x D)
 200 x 127 x 410 mm
 (8 x 5 1/9 x 16 1/4 inches)

HD inputs/outputs

HD SDI output (*1)
 BNC type (2), SMPTE 292M, 1080/50i, 60i, 30P, 25P, 24P, 720/60P, 50P
 HD SDI/SDI selectable
 HD monitor output (*2)
 BNC type (1), SMPTE 292M, 1080/50i, 60i, 30P, 25P, 24P, 720/60P, 50P
 HD SDI/SD SDI selectable
 HD SDI return input
 BNC type (3), SMPTE 292M, 1080/50i, 60i, 30P, 25P, 24P, 720/60P, 50P
 HD SDI/SD SDI/VBS selectable

SD inputs/outputs

SDI output (*1)
 BNC type (2), SMPTE 259M,
 Serial digital component
 HD SDI/SD SDI selectable

Applicable Models

HDC-1500 Multi-format HD Camera
 HDC-1000 Multi-format HD Camera

SDI monitor output (*2)
 BNC type (1), SMPTE 259M,
 Serial digital component, 480/576-lines
 HD SDI/SD SDI selectable

Analogue composite monitor output
 BNC type (1), Monitor/Sync selectable,
 character on/off selectable

SDI return input
 BNC type (3), SMPTE 259M,
 Serial digital component
 HD SDI/SD SDI/VBS selectable

VBS return input
 BNC type (3), NTSC/PAL
 HD SDI/SD SDI/VBS selectable

Sync

Reference input
 BNC type (1, with loop-through),
 HD tri-level sync or SD black burst

Sync output
 BNC type (1), HD tri-level sync or
 SD sync Sync/Monitor selectable

Intercom/Tally/PGM

Intercom PD & ENG
 D-sub 25-pin (1), 4W/RTS/CC selectable
 PGM1/PGM2 0/-20 dBu selectable
 R-Tally/G-Tally 24 V power in/make contact

Audio

MIC1/MIC2 output
 XLR-3-31 type (2, female),
 0/-20 dBu selectable
 Digital audio output (AES/EBU)

—
 Embedded audio
 Embedded audio to HD SDI/SD SDI

Prompter

Prompter in
 BNC type (1, with loop-through),
 Analogue, NTSC/PAL/HD-Y

Others

RCP/MSU/CNU interface
 8-pin (1), Sony Camera Command Network
 Protocol (for entire camera system control)

Ethernet
 RJ-45 (1), 10BASE-T/100BASE-TX

Mic remote
 D-sub 15-pin
 WF mode
 4-pin (1), Stair step
 (for SD composite Waveform monitor)

WF control
 D-sub 15-pin (1), GPI
 (for SDI component WF control)
 WF control/mic remote selectable

System expansion I/O

—
 Trunk line
 12-pin (round type connector),
 RS-232C/422 (remote line for CHU
 equipment)

Camera

Optical fibre cable interface
 SMPTE 304M based optical fibre
 connector (1), 1.5 gb/s optical fibre digital
 transmission, SMPTE 292 M

(*1) HD SDI output and SD SDI output share the same connector. (*2) HD monitor output and SD monitor output share the same connector.



HDCU-1500 rear panel

HDCU-3300 HD Super Motion Camera Control Unit

The HDCU-3300 Camera Control Unit is a camera control unit for the HDC-3300 Super Motion Camera to configure HD slow-motion camera system.

Optional Accessories

HKCU-1001 SD Analogue Interface Unit

HKCU-1005 HD/SD Expansion Unit

Applicable Models

HDC-3300 HD Super Motion Colour Camera



Specifications

General

Power supply

AC 100/120/220-240 V, 50 Hz/60 Hz

Maximum. Current consumption

5.4 A (at 100 V AC, entire system active)

Operating temperature

+5 °C to +40 °C (+41 °F to +104 °F)

Storage temperature

-20 °C to +60 °C (-4 °F to +140 °F)

Dimensions (W x H x D)

424 x 133 x 410 mm
(16 3/4 x 5 1/4 x 16 1/4 inches)

Mass

15.9kg (35 lb 1 oz)

Input/output connectors

HD SDI LINK A/B/C Super Motion Output

BNC type (1) LinkA x 2, LinkB x 2,
LinkC x 2

HD SDI output

BNC type (4), SMPTE-292M, 1080/50i,
60i, 720/60P, 50P

HD/SD SDI output

BNC type (4)
HD : SMPTE-292M 1080/50i, 60i,
720/60P, 50P
SD : SMPTE-259M

Character output (composite analogue)

BNC type (1), CHAR (1)

HD SDI return input

BNC type (4), SMPTE-292M, 1080/50i,
60i, 720/60P, 50P

SD-SDI return input

BNC type (4), SMPTE-259M,

VBS return input

BNC type (4)

Sync

Reference input

BNC type (1, with loop-through),
HD tri-level sync or SD Black Burst

Sync output

BNC type (1), HD tri-level sync
or SD Black Burst

Intercom/Tally/PGM

Intercom PD & ENG

D-sub 25-pin (1), 4W/RTS/CC selectable

PGM1/PGM2

0/-20 dBu selectable

R-Tally/G-Tally

24 V power in/make contact

Audio

MIC1/MIC2 output

XLR-3-31 type (2, female),
0/-20 dBu selectable

Digital audio output (AES/EBU)

BNC type (1), AES/EBU format,
20-bit/48 kHz

Embedded Audio

Embedded Audio to HD-SDI/SD-SDI

Prompter

Prompter in

BNC type (2, with loop-through),
Analogue, NTSC/PAL/HD-Y

Others

RCP/MSU/CNU interface

8-pin (1), Sony Camera System-700
Control Protocol
(for entire camera system control)

Ethernet

10BASE-T/100BASE-TX connector (RJ-45)

Mic Remote

D-sub 15-pin (1)

WF control

D-sub 15-pin (1), GPI
(for SDI component WF control)

WF mode

4-pin (2), Stair step
(for SD composite WF monitor)

System expansion I/O

D-sub 15-pin GPI (1, for system control
with external GPI interface)

Trunk line

12-pin (1, round type connector),
RS-232C or RS422

Camera

Optical fibre cable interface

SMPTE-304M based optical fibre
connector (1)

Optional Input/Output Boards

HKCU-1001 SD Analogue Interface Unit

VBS output

BNC type (2)

Analogue composite monitor output

BNC type: WF (1), PIX (1)

HKCU-1005 HD/SD Expansion Unit

HD SDI/SD SDI output

BNC type (2)

HD SDI/SD SDI monitor output

BNC type (2), character on/off selectable

HDLA-1500 Large Lens Adaptor (CE)

Features

- Totally new interlocking mechanism
- Low-profile design

Optional Accessories

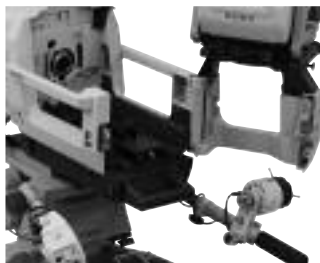
HDTX-100 HD Triax Adaptor (Fischer type) (1)

Applicable Models

HDC-1500 Multi-format HD Camera

HDC-1550 Multi-format HD Camera

HDC-3300 HD Super Motion Camera



HDLA-1500 rear panel

Note: also available as HDLA-1500/B (dark coloured version)

HDLA-1505 Large Lens Adaptor (CE)

Features

- For applications which do not require use of the HDVF-700A viewfinder •Allows operation with the HDVF-C730W colour LCD viewfinder
- Totally new interlocking mechanism
- Low-profile design

Optional Accessories

HDTX-100 HD Triax Adaptor (Fischer type) (1)

Applicable Models

HDC-1500 Multi-format HD Camera

HDC-1550 Multi-format HD Camera

HDC-3300 HD Super Motion Camera



HDLA-1505 rear panel

Note: also available as HDLA-1505/B (dark coloured version)

HDFX-100 HD Triax Adaptor (Fischer type)

Features

- Converts optical fibre transmission to the widely used triax transmission system •Long distance transmission - up to 1400 m (4500 feet) with a 14.5 mm dia. triax cable or 1000 m (3200 feet) with a 13.2 mm dia. triax cable

Optional Accessories

HDTX-100 HD Triax Adaptor (Fischer type)

HDCU-1000 Camera Control Unit

HDCU-1500 Camera Control Unit

Applicable Models

HDC-1550 HD Portable Camera



HDTX-100 HD Triax Adaptor (Fischer type)

Features

- Converts optical fibre transmission to the widely used triax transmission system •Long distance transmission - up to 1400 m (4500 feet) with a 14.5 mm dia. triax cable or 1000 m (3200 feet) with a 13.2 mm dia. triax cable

Applicable Models

HDFX-100 HD Triax Adaptor (Fischer type)

HDLA-1500 Large Lens Adaptor (CE)

HDC-1000 Multi-format HD Camera

HDC-1500 Multi-format HD Camera



HKC-T1500 CCD Block Extension Adaptor

Features

- Allows the CCD block to be extended from the camera body by up to 10m (50m with an optional cable)
- Provides compact, lightweight imaging assembly

Supplied Accessories

- Multi-core cable (12.5 m) (1)
- VF relay cable (1)
- MIC relay cable (1)
- INCOM relay cable (1)
- Top cover (1)
- Operation manual (1)

Applicable Models

- HDC-1500 Multi-format HD Camera
- HDC-1550 Multi-format HD Camera



Specifications

General

- Power requirements
 - 13.0 to 17.0 V DC
- Operating temperature
 - 20 °C to +45 °C (-4 °F to +113 °F)
- Operating humidity
 - 10% to 90% (no condensation)
- Mass
 - Cable adapter
 - approx. 0.5 kg (1 lb 2 oz)
 - Dimensions (W x H x D)
 - CCD block adapter:
 - approx. 1.9 kg (4 lb 3 oz)
 - (with CCD block)
 - Approx.130 x 240 x 250 mm
 - (5 1/8 x 9 1/2 x 9 7/8 inches)

CCD Block Adaptor I/F

- Camera cable
 - 55-pin multicore cable connector (male)
- MIC IN
 - XLR-3 (1, female)
- LENS
 - 12-pin (1)
- VF
 - 20-pin (1)
- INCOM
 - XLR-5 (1, female)

Cable Adaptor I/F

- Camera cable
 - 55-pin multicore cable connector (female)
- MIC OUT
 - XLR-3 (1, male)
- VF
 - 20-pin (1)
- INCOM
 - XLR-5 (1, male)

Production Cameras

BVP-E30P	14
BVP-E30WSP	15
DXC-D50PH	16
DXC-D50PK	18
DXC-D50PL	20
DXC-D50WSPL	22

BVP-E30P 3-chip CCD Portable Colour Camera

Features

- Portable studio/OB/EFP camera
- Three-chip Power HAD EX CCD imager for superb picture quality
- Advanced digital signal processing and 14-bit A/D conversion
- Switchable progressive* and interlace modes
- Excellent signal-to-noise ratio of 65 dB and remarkably low smear level of -145 dB (typical)
- High sensitivity of F11 at 2000 lx
- Digital 3-D white shading
- Cross colour suppression function
- Low key saturation function
- Adaptive highlight control (Auto knee mode)
- Knee saturation control
- Multi-matrix function
- Enhanced vertical detail (Non-additive mix)
- Adaptive detail control
- Triple skin tone detail control
- Electronic soft focus
- Full compatibility with current Sony Camera Control Units for seamless integration into Sony BVP-900P Series, and BVP-E10 Series camera systems using existing Sony MSUs, CNUs and RCPs
- Compatible with Sony Wireless Camera System WLL-CA55 and WLL-RX55
- Wideband component triax transmission system
- Auto tracing white balance
- Assignable switches
- Memory Stick system for storage/recall of parameters
- Menu knob
- Adjustable shoulder pad

*25PsF



Supplied Accessories

Operational manual (1)
CD-ROM Operation manual (1)
Label for assignable switch (1)

Optional Accessories

CA-590P Camera Adaptor
WLL-CA55 Wireless Camera Transmitter (CER)
CA-905F Large Lens Adaptor (Fischer Type)
CCU-790P Camera Control Unit
CCU-590P Portable Camera Control Unit
RM-B750 Remote Control Unit
RM-B150 Remote Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control type)
RCP-700 Remote Control Panel (Joystick Type)
RCP-701 Remote Control Panel (Dial Control Type)
CNU-700 Camera Command Network Unit
VCS-700 Video Selector
MSU-900 Master Setup Unit
MSU-950 Master Setup Unit
MSA-A "Memory Stick" IC Memory Media
VCT-14 Tripod Adaptor
AC-550CE AC Adaptor
BVF-55CE 5-inch Type B/W Viewfinder (CCIR)
BVF-10CE 1.5-inch Type B/W CRT Viewfinder (CCIR)

Specifications

General

Power consumption:
13 W
Operating temperature:
-20 °C to + 45 °C (-4 °F to +113 °F)
Storage temperature:
-20 °C to + 60 °C (-4 °F to +140 °F)

Dimensions (W x H x D):

125 x 285 x 291 mm (5 x 11 1/4 x 11 1/2 inches)

Mass:

Approx. 2.5 kg (5 lb 8 oz) (not including viewfinder)

Camera

A/D conversion:
14 bits
Optical system:
F 1.4 prism
Image device:
3-chip 2/3-inch type Power HAD CCD
Total picture elements (H x V):
1038 x 1188
Smear level (typical):
-145 dB
Scan format:
50i, 25PsF
Built in filters:
1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
Horizontal resolution (center):
900 TV Lines
Modulation depth (center):
80%
Vertical resolution:
480 TV lines/530 TV lines (with EVS)
S/N ratio (typical):
65 dB
Sensitivity (typical):
F 11 at 2000 lx
(3200K 89.9% reflectance)
Gain selection:
-3, 0, +3, +6, +9, +12, +18, +24, +30, +36, +42 dB
Set-up memory card:
Memory Stick
Shutter speed:
1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 s
Clear scan:
1/25(*) to 1/6000 s

Interface

Input connector:
Microphone: XLR 3-pin, -60 dBu
Output connector:
Test out: BNC type, 1.0 Vp-p, 75 Ω, unbalanced
Others:
Lens: 12-pin
View finder: 20-pin
Digital interface: 68-pin
Analogue interface: 68-pin
Lens mount: Special bayonet mount (B4)

Eco-info

Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

(*)1/25-1/50 are on PsF mode.

BVP-E30WSP 3-chip CCD Portable Colour Camera

Features

- Portable studio/OB/EFP camera • Three-chip Power HAD EX CCD imager for superb picture quality • Advanced digital signal processing and 14-bit A/D conversion
- Switchable progressive* and interlace modes • Excellent signal-to-noise ratio of 65 dB and remarkably low smear level of -145 dB (typical) • High sensitivity of F11 at 2000 lx
- Digital 3-D white shading • Cross colour suppression function • Low key saturation function • Adaptive highlight control (Auto knee mode) • Knee saturation control
- Multi-matrix function • Enhanced vertical detail (Non-additive mix) • Adaptive detail control • Triple skin tone detail control • Electronic soft focus • Full compatibility with current Sony Camera Control Units for seamless integration into Sony BVP-900P Series, and BVP-E10 Series camera systems using existing Sony MSUs, CNU's and RCP's • Compatible with Sony Wireless Camera System WLL-CA55 and WLL-RX55 • Wideband component triax transmission system • CC filter- electronic and optical • Auto tracing white balance • Assignable switches • Memory Stick system for storage/recall of parameters • Menu knob • Adjustable shoulder pad

*25PsF



Supplied Accessories

Operational manual (1)
CD-ROM Operation manual (1)
Label for assignable switch (1)

Optional Accessories

CA-590P Camera Adaptor
WLL-CA55 Wireless Camera Transmitter (CER)
CA-905F Large Lens Adaptor (Fischer Type)
CCU-790P Camera Control Unit
CCU-590P Portable Camera Control Unit
RM-B750 Remote Control Unit
RM-B150 Remote Control Unit
RCP-750 Remote Control Panel (Joystick type)
RCP-751 Remote Control Panel (Dial control type)
RCP-700 Remote Control Panel (Joystick Type)
RCP-701 Remote Control Panel (Dial Control Type)
CNU-700 Camera Command Network Unit
VCS-700 Video Selector
MSU-900 Master Setup Unit
MSU-950 Master Setup Unit
MSA-A "Memory Stick" IC Memory Media
VCT-14 Tripod Adaptor
AC-550CE AC Adaptor
BVF-55CE 5-inch Type B/W Viewfinder (CCIR)
BVF-20WCE 2-inch Type 16:9 B/W Viewfinder

Specifications

General

Power consumption:
13 W
Operating temperature:
-20 °C to + 45 °C (-4 °F to +113 °F)
Storage temperature:
-20 °C to + 60 °C (-4 °F to +140 °F)

Dimensions (W x H x D):

125 x 285 x 291 mm (5 x 11 1/4 x 11 1/2 inches)

Mass:

Approx. 2.5 kg (5 lb 8 oz) (not including viewfinder)

Camera

A/D conversion:
14 bits
Optical system:
F 1.4 prism
Image device:
3-chip 2/3-inch type Power HAD CCD
Total picture elements (H x V):
1038 x 1188
Smear level (typical):
-145 dB
Scan format:
50i, 25PsF
Built in filters:
1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
A: CROSS, B: 3200K, C: 4300K, D: 6300K
Horizontal resolution (center):
700 TV Lines
Modulation depth (center):
80% (16:9)/60% (4:3)
Vertical resolution:
480 TV lines/530 TV lines (with EVS)
S/N ratio (typical):
65 dB
Sensitivity (typical):
F 11 at 2000 lx
(3200K 89.9% reflectance)
Gain selection:
-3, 0, +3, +6, +9, +12, +18, +24, +30, +36, +42 dB
Set-up memory card:
Memory Stick
Shutter speed:
1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 s

Clear scan:

1/25(*) to 1/6000 s

Interface

Input connector:
Microphone: XLR 3-pin, -60 dBu
Output connector:
Test out: BNC type, 1.0 Vp-p, 75 Ω, unbalanced
Others:
Lens: 12-pin
View finder: 20-pin
Digital interface: 68-pin
Analogue interface: 68-pin
Lens mount: Special bayonet mount (B4)

Eco-info

Lead-free solder is used for soldering. Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

(*)1/25-1/50 are on PsF mode.

DXC-D50PH 3-chip CCD Portable Colour Camera

Features

- Compact and lightweight: 2.2 kg (4 lb 13 oz) for camera head only
- Three 2/3-inch type Power HAD CCDs offer low smear level characteristics, high sensitivity and high S/N ratio (63 dB), high horizontal resolution (920 TV lines)
- Hyper Gain (36 dB)
- 12-bit AD converter and DSP (Digital Signal Processing)
- Knee Saturation process for faithful colour reproduction even in highlight area
- Adaptive Highlight Control realize optimum contrast balance
- Skin-Tone Detail function with auto detection of active area
- Horizontal Detail Frequency Control
- Low Key Saturation function
- Cross-Colour Suppression
- Black halo-free
- Total Level Control System (TLCS) for extended range of Iris control
- Auto Tracing White Balance (ATW) function
- EZ Mode and EZ Focus for quick camera setup
- Scene File Operation by RCP-D50/D51
- File Operation using Memory Stick
- Optical Neutral Density (ND) filter and electronic Colour Correction (CC) filter
- Clear Scan (CLS) Function



Supplied Accessories

- Camera head (1)
- Camera handle (1)
- Operating instructions (1)
- Chart for flange focal (1)
- Lens mount cap (1)
- Wind screen (1)

Optional Accessories

- CA-D50 Camera Adaptor
- CCU-D50P Camera Control Unit
- CA-TX50P Camera Triax Adaptor
- CCU-TX50P Camera Control Unit
- RCP-D50 Remote Control Panel (Joystick Type)
- RCP-D51 Remote Control Panel (Dial Control Type)
- BC-M150 Ni-MH & Li-ion Battery Charger
- BP-GL65 Rechargeable Lithium-ion Battery Pack
- BP-GL95 Rechargeable Lithium-ion Battery Pack
- CMA-8ACE AC Adaptor
- ECM-678 Electret Condenser Microphone
- CAC-12 Camera Microphone Holder
- WRT-847B UHF Handheld Transmitter
- WRT-822B UHF Beltpack Transmitter
- WRR-855B UHF Slot-in Receiver
- WRR-862B UHF Dual Receiver
- DXF-51 5-inch Monochrome Viewfinder
- VCT-U14 Tripod Adaptor
- CCZ-A Cables 26-pin/26-pin Cable
- LC-HB330 Carrying Case
- LCR-1 Camera Rain Cover
- PH-8S Intercommunication Headset

Production Cameras

Specifications

Image device:	VIDEO OUT:
3-chip 2/3-inch type IT CCD	BNC
A/D conversion:	LENS:
12 bits	12-pin
Optics:	VF:
F1.4 medium index prism system	20-pin
Effective picture elements (H x V):	MONITOR OUT:
980 x 586	BNC type
Total picture elements (H x V):	REMOTE:
1038 x 1188	10-pin
Sensing area:	MIC IN:
6.6 mm x 8.8 mm	XLR 3-pin
Built-in filters:	Power requirements:
1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND	DC 12 V (10.5 to 17 V)
Electronic filter:	Power consumption:
5600K (on/off)	14 W
Lens mount:	Operating temperature:
Sony 2/3-inch Bayonet mount	-10°C to 45°C (14°F to 113°F)
Signal system:	Operating humidity:
PAL colour system	Less than 85%
Scanning system:	Storage humidity:
2:1 interlaced, 525 lines, 60 fields/s	Less than 90%
Horizontal resolution:	Mass (camera head only):
15.625 kHz	2.2 kg (4 lb 13 oz)
Vertical frequency:	Eco Info:
50 Hz	Lead-free solder is used for soldering
Sync system:	certain parts.
Internal or external with VBS or BS signal	Halogenated flame retardants are not used
Horizontal resolution:	in cabinets.
920 TV lines	
Vertical resolution:	
480 TV lines (without EVS), 530 TV lines (with EVS)	
Minimum illumination:	
0.5 lx with F1.4, Hyper Gain (36 dB)	
0.8 lx with F1.8, Hyper Gain (36 dB)	
Sensitivity:	
F11 at 2000 lx (3200 K, 89.9% reflectance) (typical)	
Gain selection:	
-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB	
Shutter speed selection:	
OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 s	
Clear scan selection:	
50.2 to 6000 Hz	
Signal-to-noise ratio:	
63 dB (typical)	
Registration:	
0.05% (all zones, without lens)	
Geometric distortion:	
Below measurable level	
Power requirements:	
DC 12 V	
Video output:	
Camera head BNC connector	
VBS:	
1.0 Vp-p, sync negative	
26-pin connector of CA-D50	
VBS:	
1.0 Vp-p, sync negative	
Y/R-Y/B-Y:	
Y: 1.0 Vp-p negative	
R-Y/B-Y: 525 mVp-p	
RGB:	
1.4 Vp-p	
Y/C:	
Y: 1.0 Vp-p negative	
C: 300 mVp-p (burst level)	
Input/output	
INTERFACE:	
Pro 76-pin DIGITAL, Pro 50-pin	

DXC-D50PK 3-chip CCD Portable Colour Camera

Features

- Compact and lightweight: 2.2 kg (4 lb 13 oz) for camera head only
- Three 2/3-inch type Power HAD CCDs offer low smear level characteristics, high sensitivity and high S/N ratio (63 dB), high horizontal resolution (920 TV lines)
- Hyper Gain (36 dB)
- 12-bit AD converter and DSP (Digital Signal Processing)
- Knee Saturation process for faithful colour reproduction even in highlight area
- Adaptive Highlight Control realize optimum contrast balance
- Skin-Tone Detail function with auto detection of active area
- Horizontal Detail Frequency Control
- Low Key Saturation function
- Cross-Colour Suppression
- Black halo-free
- Total Level Control System (TLCS) for extended range of Iris control
- Auto Tracing White Balance (ATW) function
- EZ Mode and EZ Focus for quick camera setup
- Scene File Operation by RCP-D50/D51
- File Operation using Memory Stick
- Optical Neutral Density (ND) filter and electronic Colour Correction (CC) filter
- Clear Scan (CLS) Function



Supplied Accessories

- Camera head (1)
- Camera handle (1)
- Operating instructions (1)
- Chart for flange focal (1)
- Lens mount cap (1)
- Wind screen (1)
- External Microphone (1)
- DXF-801 Viewfinder (1)
- Zoom Lens (1)

Optional Accessories

- CA-D50 Camera Adaptor
- CCU-D50P Camera Control Unit
- CA-TX50P Camera Triax Adaptor
- CCU-TX50P Camera Control Unit
- RCP-D50 Remote Control Panel (Joystick Type)
- RCP-D51 Remote Control Panel (Dial Control Type)
- BP-GL65 Rechargeable Lithium-ion Battery Pack
- BP-GL95 Rechargeable Lithium-ion Battery Pack
- BC-M150 Ni-MH & Li-ion Battery Charger
- CMA-8ACE AC Adaptor
- ECM-678 Electret Condenser Microphone
- CAC-12 Camera Microphone Holder
- WRT-847B UHF Handheld Transmitter
- WRT-822B UHF Belt-pack Transmitter
- WRR-855B UHF Slot-in Receiver
- WRR-862B UHF Dual Receiver
- DXF-51 5-inch Monochrome Viewfinder
- VCT-U14 Tripod Adaptor
- CCZ-A Cables 26-pin/26-pin Cable
- LC-HB330 Carrying Case
- LCR-1 Camera Rain Cover
- PH-8S Intercommunication Headset



Specifications

Image device:	VIDEO OUT:
3-chip 2/3-inch type IT CCD	BNC
A/D conversion:	LENS:
12 bits	12-pin
Optics:	VF:
F1.4 medium index prism system	20-pin
Effective picture elements (H x V):	MONITOR OUT:
980 x 586	BNC type
Total picture elements (H x V):	REMOTE:
1038 x 1188	10-pin
Sensing area:	MIC IN:
6.6 mm x 8.8 mm	XLR 3-pin
Built-in filters:	Power requirements:
1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND	DC 12 V (10.5 to 17 V)
Electronic filter:	Power consumption:
5600K (on/off)	14 W
Lens mount:	Operating temperature:
Sony 2/3-inch Bayonet mount	-10°C to 45°C (14°F to 113°F)
Signal system:	Operating humidity:
PAL colour system	Less than 85%
Scanning system:	Storage humidity:
2:1 interlaced, 525 lines, 60 fields/s	Less than 90%
Horizontal resolution:	Mass (camera head only):
15.625 kHz	2.2 kg (4 lb 13 oz)
Vertical frequency:	*Eco Info*:
50 Hz	Lead-free solder is used for soldering
Sync system:	certain parts.
Internal or external with VBS or BS signal	Halogenated flame retardants are not used
Horizontal resolution:	in cabinets.
920 TV lines	
Vertical resolution:	
480 TV lines (without EVS), 530 TV lines (with EVS)	
Minimum illumination:	
0.5 lx with F1.4, Hyper Gain (36 dB)	
0.8 lx with F1.8, Hyper Gain (36 dB)	
Sensitivity:	
F11 at 2000 lx (3200 K, 89.9% reflectance) (typical)	
Gain selection:	
-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB	
Shutter speed selection:	
OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 s	
Clear scan selection:	
50.2 to 6000 Hz	
Signal-to-noise ratio:	
63 dB (typical)	
Registration:	
0.05% (all zones, without lens)	
Geometric distortion:	
Below measurable level	
Power requirements:	
DC 12 V	
Video output:	
Camera head BNC connector	
VBS:	
1.0 Vp-p, sync negative	
26-pin connector of CA-D50	
VBS:	
1.0 Vp-p, sync negative	
Y/R-Y/B-Y:	
Y: 1.0 Vp-p negative	
R-Y/B-Y: 525 mVp-p	
RGB:	
1.4 Vp-p	
Y/C:	
Y: 1.0 Vp-p negative	
C: 300 mVp-p (burst level)	
Input/output	
INTERFACE:	
Pro 76-pin DIGITAL, Pro 50-pin	

DXC-D50PL 3-chip CCD Portable Colour Camera

Features

- Compact and lightweight: 2.2 kg (4 lb 13 oz) for camera head only
- Three 2/3-inch type Power HAD CCDs offer low smear level characteristics, high sensitivity and high S/N ratio (63 dB), high horizontal resolution (920 TV lines)
- Hyper Gain (36 dB)
- 12-bit AD converter and DSP (Digital Signal Processing)
- Knee Saturation process for faithful colour reproduction even in highlight area
- Adaptive Highlight Control realize optimum contrast balance
- Skin-Tone Detail function with auto detection of active area
- Horizontal Detail Frequency Control
- Low Key Saturation function
- Cross-Colour Suppression
- Black halo-free
- Total Level Control System (TLCS) for extended range of Iris control
- Auto Tracing White Balance (ATW) function
- EZ Mode and EZ Focus for quick camera setup
- Scene File Operation by RCP-D50/D51
- File Operation using Memory Stick
- Optical Neutral Density (ND) filter and electronic Colour Correction (CC) filter
- Clear Scan (CLS) Function



Supplied Accessories

- Camera head (1)
- Camera handle (1)
- Operating instructions (1)
- Chart for flange focal (1)
- Lens mount cap (1)
- Wind screen (1)
- External Microphone (1)
- DXF-801 Viewfinder (1)

Optional Accessories

- CA-D50 Camera Adaptor
- CCU-D50P Camera Control Unit
- CA-TX50P Camera Triax Adaptor
- CCU-TX50P Camera Control Unit
- RCP-D50 Remote Control Panel (Joystick Type)
- RCP-D51 Remote Control Panel (Dial Control Type)
- RM-M7G Remote Control Unit
- BP-GL65 Rechargeable Lithium-ion Battery Pack
- BP-GL95 Rechargeable Lithium-ion Battery Pack
- BC-M150 Ni-MH & Li-ion Battery Charger
- CMA-8ACE AC Adaptor
- ECM-678 Electret Condenser Microphone
- CAC-12 Camera Microphone Holder
- WRT-847B UHF Handheld Transmitter
- WRT-822B UHF Beltpack Transmitter
- WRR-855B UHF Slot-in Receiver
- WRR-862B UHF Dual Receiver
- DXF-51 5-inch Monochrome Viewfinder
- VCT-U14 Tripod Adaptor
- CCZ-A Cables 26-pin/26-pin Cable
- LC-HB330 Carrying Case
- LCR-1 Camera Rain Cover
- PH-8S Intercommunication Headset

Specifications

Image device:	VIDEO OUT:
3-chip 2/3-inch type IT CCD	BNC
A/D conversion:	LENS:
12 bits	12-pin
Optics:	VF:
F1.4 medium index prism system	20-pin
Effective picture elements (H x V):	MONITOR OUT:
980 x 586	BNC type
Total picture elements (H x V):	REMOTE:
1038 x 1188	10-pin
Sensing area:	MIC IN:
6.6 mm x 8.8 mm	XLR 3-pin
Built-in filters:	Power requirements:
1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND	DC 12 V (10.5 to 17 V)
Electronic filter:	Power consumption:
5600K (on/off)	14 W
Lens mount:	Operating temperature:
Sony 2/3-inch Bayonet mount	-10°C to 45°C (14°F to 113°F)
Signal system:	Operating humidity:
PAL colour system	Less than 85%
Scanning system:	Storage humidity:
2:1 interlaced, 525 lines, 60 fields/s	Less than 90%
Horizontal resolution:	Mass (camera head only):
15.625 kHz	2.2 kg (4 lb 13 oz)
Vertical frequency:	*Eco Info*:
50 Hz	Lead-free solder is used for soldering
Sync system:	certain parts.
Internal or external with VBS or BS signal	Halogenated flame retardants are not used
Horizontal resolution:	in cabinets.
920 TV lines	
Vertical resolution:	
480 TV lines (without EVS), 530 TV lines (with EVS)	
Minimum illumination:	
0.5 lx with F1.4, Hyper Gain (36 dB)	
0.8 lx with F1.8, Hyper Gain (36 dB)	
Sensitivity:	
F11 at 2000 lx (3200 K, 89.9% reflectance) (typical)	
Gain selection:	
-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB	
Shutter speed selection:	
OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 s	
Clear scan selection:	
50.2 to 6000 Hz	
Signal-to-noise ratio:	
63 dB (typical)	
Registration:	
0.05% (all zones, without lens)	
Geometric distortion:	
Below measurable level	
Power requirements:	
DC 12 V	
Video output:	
Camera head BNC connector	
VBS:	
1.0 Vp-p, sync negative	
26-pin connector of CA-D50	
VBS:	
1.0 Vp-p, sync negative	
Y/R-Y/B-Y:	
Y: 1.0 Vp-p negative	
R-Y/B-Y: 525 mVp-p	
RGB:	
1.4 Vp-p	
Y/C:	
Y: 1.0 Vp-p negative	
C: 300 mVp-p (burst level)	
Input/output	
INTERFACE:	
Pro 76-pin DIGITAL, Pro 50-pin	

DXC-D50WSPL 3-chip CCD Portable Colour Camera

Features

- Compact and lightweight: 2.2 kg (4 lb 13 oz) for camera head only
- Three 2/3-inch type Power HAD CCDs offer low smear level characteristics, high sensitivity and high S/N ratio (63 dB), and high horizontal resolution (850 TV lines/4:3 mode, 800 TV lines/16:9 mode)
- 16:9 and 4:3 Switchable
- 16:9 ID Pulse
- Hyper Gain (36 dB)
- 12-bit AD converter and DSP (Digital Signal Processing)
- Knee Saturation process for faithful colour reproduction even in highlight area
- Adaptive Highlight Control realize optimum contrast balance
- Skin-Tone Detail function with auto detection of active area
- Horizontal Detail Frequency Control
- Low Key Saturation function
- Cross-Colour Suppression
- Black halo-free
- Total Level Control System (TLCS) for extended range of Iris control
- Auto Tracing White Balance (ATW) function
- EZ Mode and EZ Focus for quick camera setup
- Scene File Operation by RCP-D50/D51
- File Operation Using Sony Memory Stick
- Clear Scan (CLS) Function



Supplied Accessories

- Camera head (1)
- Camera handle (1)
- Operating instructions (1)
- Chart for flange focal (1)
- Lens mount cap (1)
- Wind screen (1)
- External Microphone (1)
- DXF-801 Viewfinder (1)

Optional Accessories

- CA-D50 Camera Adaptor
- CCU-D50P Camera Control Unit
- CA-TX50P Camera Triax Adaptor
- CCU-TX50P Camera Control Unit
- RCP-D50 Remote Control Panel (Joystick Type)
- RCP-D51 Remote Control Panel (Dial Control Type)
- BP-GL65 Rechargeable Lithium-ion Battery Pack
- BP-GL95 Rechargeable Lithium-ion Battery Pack
- BC-M150 Ni-MH & Li-ion Battery Charger
- CMA-8ACE AC Adaptor
- ECM-678 Electret Condenser Microphone
- CAC-12 Camera Microphone Holder
- WRT-847B UHF Handheld Transmitter
- WRT-822B UHF Beltpack Transmitter
- WRR-855B UHF Slot-in Receiver
- WRR-862B UHF Dual Receiver
- DXF-51 5-inch Monochrome Viewfinder
- VCT-U14 Tripod Adaptor
- CCZ-A Cables 26-pin/26-pin Cable
- LC-HB330 Carrying Case
- LCR-1 Camera Rain Cover
- PH-8S Intercommunication Headset

Specifications

Image device:	3-chip 2/3-inch type IT CCD	VIDEO OUT:	BNC
A/D conversion:	12 bits	LENS:	12-pin
Optics:	F1.4 medium index prism system	VF:	20-pin
Effective picture elements (H x V):	980 x 586	MONITOR OUT:	BNC type
Total picture elements (H x V):	1038 x 1188	REMOTE:	10-pin
Sensing area:	9.6 mm x 5.4 mm	MIC IN:	XLR 3-pin
Built-in filters:	1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND	Power requirements:	DC 12 V (10.5 to 17 V)
Electronic filter:	5600K (on/off)	Power consumption:	14 W
Lens mount:	Sony 2/3-inch Bayonet mount	Operating temperature:	-10°C to 45°C (14°F to 113°F)
Signal system:	PAL colour system	Operating humidity:	Less than 85%
Scanning system:	2:1 interlaced, 625 lines, 50 fields/s	Storage humidity:	Less than 90%
Horizontal resolution:	15.625 kHz	Mass (camera head only):	2.2 kg (4 lb 13 oz)
Vertical frequency:	50 Hz	*Eco Info*:	Lead-free solder is used for soldering certain parts.
Sync system:	Internal or external with VBS or BS signal		Halogenated flame retardants are not used in cabinets.
Horizontal resolution:	850 TV lines (4:3 mode), 800 TV lines (16:9 mode)		
Vertical resolution:	480 TV lines (without EVS), 530 TV lines (with EVS)		
Minimum illumination:	0.5 lx with F1.4, Hyper Gain (36 dB)		
	0.8 lx with F1.8, Hyper Gain (36 dB)		
Sensitivity:	F11 at 2000 lx (3200 K, 89.9% reflectance) (typical)		
Gain selection:	-3 dB, 0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB		
Shutter speed selection:	OFF, 1/60, 1/250, 1/500, 1/1000, 1/2000 s		
Clear scan selection:	50.2 to 6000 Hz		
Signal-to-noise ratio:	63 dB (typical)		
Registration:	0.05% (all zones, without lens)		
Geometric distortion:	Below measurable level		
Power requirements:	DC 12 V		
Video output:	Camera head BNC connector		
	VBS:		
	1.0 Vp-p, sync negative		
	26-pin connector of CA-D50		
	VBS:		
	1.0 Vp-p, sync negative		
	Y/R-Y/B-Y:		
	Y: 1.0 Vp-p negative		
	R-Y/B-Y: 525 mVp-p		
	RGB:		
	1.4 Vp-p		
	Y/C:		
	Y: 1.0 Vp-p negative		
	C: 300 mVp-p (burst level)		
Input/output			
INTERFACE:	Pro 76-pin DIGITAL, Pro 50-pin		

SONY

Sensor Cameras

BRC-300	26
BRC-H700	28
DXC-390P	30
DXC-990P	32
DXC-C33P	34

BRC-300 3-CCD Colour Video Camera

Features

- 1/4.7-type IT Mega Pixels 3-CCD with Advanced HAD technology
- Unique-all-in-one design - Combines camera, lens & pan/tilt mount
- 48x zoom capability
- Minimum illumination - 7 lx at F1.6
- Horizontal resolution 600 TV lines
- High performance Pan/Tilt/Zoom mechanism
- 4:3/16:9 aspect selectable (16:9 precision technology)
- Image flip function - Allows for desk top or ceiling mount installation
- Optional interface card slot - RGB, SDI, and Fibre
- Optional easy-to-use and ergonomic designed RemoteControl Unit - Remotely control via RS-232C and RS-422 (VISCA protocol)
- Optional Optical Multiplex Unit - Allows for long-distance operation using fibre cable

Supplied Accessories

- AC adaptor (1)
- IR remote commander (1)
- Terminal connector (1)
- AC adaptor cable (1)
- Ceiling bracket (2)
- Operating instructions (1)

Optional Accessories

- BRBK-301 Analogue/RGB Component Card
- BRBK-302 SDI Card
- BRBK-303 Optical Multiplex Card
- RM-BR300 Remote Control Unit
- BRU-300 Optical Multiplex Unit
- CCFC-M100 Optical Fibre Cable
- CCXC-9DBS Cable 9-pin/5BNCs Cable
- VCL-HG0737X Wide Conversion Lens
- CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin



Specifications

Image device:

Three 1/4.7 type IT Advanced HAD CCD (x3),
1070000pixels (gross)

CCD effective pixels

4:3 mode:

960 (H) x 720 (V)

16:9 mode:

1,152 (H) x 648 (V)

Effective pixels

NTSC:

768 (H) x 494 (V)

PAL:

752 (H) x 582 (V)

Signal systems:

NTSC/PAL

Horizontal resolution:

600 TV lines(4:3 mode)

Sync systems:

Internal/External

Lens:

12x optical zoom, 48x with digital zoom

Focal length:

f = 3.6 to 43.2 mm (F1.6 to F2.8)

Horizontal viewing angle

4:3 mode:

3.3 (Tele end) to 37.8 degrees (Wide end)

16:9 mode:

4.0 (Tele end) to 45.4 degrees (Wide end)

Minimum object distance:

300 mm (Wide end), 800 mm (Tele end)

Pan/Tilt angle:

-170 to +170 degrees (Pan), -30 to +90
degrees (Tilt)

Pan/Tilt speed:

0.25 to 60 degrees/s (Pan/Tilt)

Minimum illumination:

7 lx at F1.6

S/N ratio:

50 dB

Shutter speed

NTSC:

1/10000 to 1/4 s

PAL:

1/10000 to 1/3 s

Gain:

Auto/Manual (-3 to 18 dB, 3 dB steps)
switchable

White balance:

Auto, Indoor, Outdoor, One-push WB, Manual

Preset positioning:

6 positions

Analogue output:

VBS (BNC), Y/C (4-pin Mini DIN)

Camera control interface:

RS-232C (VISCA protocol) / RS-422 (VISCA
protocol)

Back-light compensation:

On / Off

Operating temperature:

0 to 40 degrees (32 to 104 °F)

Storage temperature:

-20 to 60 degrees (-4 to 140 °F)

Power requirement:

DC 12 V

Power consumption:

21.6 W (without optional card)

Dimensions (W x H x D):

180 x 210.1 x 205 mm (7 1/8 x 8 3/8 x 8 1/8 x
inches) (without projection ports)

Mass:

2.7 kg (5 lb 15 oz)

BRC-H700 HD 3CCD Colour Video Camera

Features

- Superb picture quality with three 1.07 megapixel HD CCDs
- High-performance Pan/Tilt/Zoom mechanism
- RS-232C/RS-422 remote control (VISCA protocol)
- Versatile video outputs
- Flexible installation - ceiling mount or flat surface
- Sixteen presets
- Multi-function IR remote commander unit
- Easy-to-use and ergonomically designed remote control unit (RM-BR300)
- Optical multiplex unit (BRU-H700)

Supplied Accessories

- IR Remote Commander Unit
- Wire rope
- Mounting screws
- Operating instructions
- AC adaptor
- AC power cable
- Ceiling bracket
- RS-422 terminal block connector

Optional Accessories

- BRBK-H700 HD Optical Multiplex Card With Audio IN (RCA pin)
- HFBK-HD1 HD SDI Output Board
- HFBK-SD1 SDI Output Board
- HFBK-XG1 XGA Output Board
- RM-BR300 Remote Control Unit
- CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin
- CCXC-9DBS Cable 9-pin/5BNCs Cable
- HFBK-TS1 iLINK (HDV) Output Board

Service Parts

- HD Optical Multiplex Unit



Specifications

Image device

Three 1/3 type IT CCDs

Total picture elements

Approx. 1.12 Megapixels

Effective picture elements

Approx. 1.07 Megapixels

Signal systems

1080/59.94i, 1080/50i (switchable)

Lens

12x optical zoom, 48x with digital zoom

Carl Zeiss Vario-Sonnar T*(R)

Focal length

f=4.5 to 54.0 mm (F1.6 to F2.8)

Minimum object distance

800 mm (Tele end)

Horizontal viewing angle without Image Stabilization

5.5 degrees (Tele) to 60.3 degrees (Wide)

Vertical viewing angle without Image Stabilization

3.1 degrees (Tele) to 36.2 degrees (Wide)

Focus system

Auto/Manual

Pan/Tilt angle

-170 to +170 degrees (Pan),

-30 to +90 degrees (Tilt)

Pan/Tilt speed

0.25 to 60 degrees/s (Pan/Tilt)

Minimum illumination

6 lx (50 IRE, F1.6)

S/N ratio

50 dB

Shutter speed

1/10,000 to 1/59.94 (1/50) s

Gain

Auto/Manual (0 to 18 dB and Hyper Gain)

White balance

Auto, Indoor, Outdoor, One-push WB, Manual

Optical Image Stabilizer

On/Off

Image flip

On/Off

ND filter

Off/ND1/ND2

Preset positioning

16 positions

Video output (Built-in)

Analogue RGB, Analogue Y/Pb/Pr

Video output (With optional card(s))

HFBK-HD1: HD-SDI,

HFBK-SD1: Down converted SD

(RGB, Y/Cb/Cr, Y/C, Composite, SDI x2)

HFBK-XG1: WXGA, XGA, VGA,

HFBK-TS1: HDV

Camera control interface

RS-232C/RS-422 (VISCA protocol)

Backlight compensation

On/Off

Operating temperature

0 to 40 degrees (32° to 104° F)

Storage temperature

-20 to 60 degrees (-4° to 140° F)

Power requirements

DC 12 V

Power consumption

Max. 24 W (without optional card)

Dimensions (Diameter x H)

207 x 315.8 mm (8 1/8 x 12 1/2 inches)

Mass

4.5 kg (9 lb 15 oz)

Features

-
- A black and white photograph of a Sony CCD camera. The camera has a large, complex lens assembly on the left and a white, rectangular body on the right. The word 'SONY' is printed on the white body. The camera is shown from a side-on perspective, angled slightly upwards.

The rear panel of the Sony CCD-IR1000 camera features several ports and controls. At the top left is a BNC connector labeled "BNC RM/VHS (C)". To its right is a "VIDEO IN" port. Below the BNC connector is a "VIDEO LOSS" switch with "OFF" and "ON" positions. In the center is a "TRIP IN" port. To the right of the trip in port is a "LENS" port. At the bottom left is a "DIN 4" connector. At the bottom right is a "REMOTE (C)" port.

Tripod adaptor (1)

Operation manual (1)

Panel sheet for RM-C950 (1)

VCL-616WEA 1/3 Type C-mount Lens

RM-C950 Remote Control Unit

CMA-D2CE Camera Adaptor

CMA-D3CE Camera Adaptor

CCDC cables 12-pin/4-pin DC Cables

CCXC-12 cables 12-pin/12-pin Multi Core Cables

CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin

Sensor Cameras

Specifications

Image device:
1/3 type IT (Interline Transfer) CCD (x3)

Effective picture elements:
752 (H) × 582 (V)

Sensing area:
6.00 (H) × 4.96 (V) mm

Scanning system:
2:1 interlaced, 625 lines

Horizontal frequency:
15.625 kHz

Vertical frequency:
50 Hz

Sync system:
Internal or External with VBS,
HD/VD(Automatic Switching)

Phase control:
H/SC phase control

Horizontal resolution:
800TV lines

Lens mount:
C mount

Flange back:
17.526 mm in air

Sensitivity:
F8.0 at 2000 lux

Minimum illumination
4 lux (F2, GAIN:HYPER)

S/N ratio:
61 dB

Gain
STEP/AGC/HYPER selectable
STEP:
0 to 24 dB by 1 dB step
AGC:
0 to 24 dB (Limit value: 6 dB, 12 dB,
18 dB, 24 dB variable)
HYPER:
30 dB

Electronic shutter
OFF/STEP/VARIABLE/CCD IRIS selectable
OFF:
1/50 s
STEP:
OFF (PAL:1/50 s), F.L.(PAL:1/120 s),
1/125, 1/250, 1/500, 1/1000, 1/2000,
1/4000, 1/10000, 1/20000, 1/40000,
1/100000, 0.1, 0.2, 0.3, 0.5, 1.0, 1.5,
2.0, 2.5, 3.0, 3.5, 4.0, 5.0, 6.0, 7.0,
8.0 s
VARIABLE:
in high-speed mode 310/625 to
1/625H, OFF
in low-speed mode 255 to 1 frames
for field mode
256 to 2 frames for frame mode

CCD IRIS:
1/60 to 1/100,000 s (Limit value:
1/500, 1/1000, 1/2000, 1/4000,
1/10000, 1/20,000, 1/40,000,
1/100,000 s variable)

Lens:
Remote (Auto or Manual)/Video selectable

AE area:
Multi/Large/Medium/Spot/Slit/Manual
selectable

AE level:
Variable

AE speed:
Fast/Mid/Slow selectable

AE detect:
Average/Peak selectable

Contrast Effect:
Manual/DynaLatitude/DCC+ selectable

Knee Point:
High/Normal/Low selectable(Contrast
Effect: Manual)

Black stretch:
Variable (Contrast Effect: Manual)

Gamma:
ON/OFF Variable

Pedestal:
Master and R/B Manual adjustable

Black balance:
ABB

White balance:
AWB/ATW NORMAL/ATW
WIDE/MANUAL/3200K/5600K selectable
AWB or ATW R/B Paint, MANUAL R/B Gain

ATW area:
NORMAL/MANU selectable

ATW speed:
FAST/NORMAL/SLOW selectable

Detail level:
ON/OFF (Variable at ON)

Detail Frequency:
HIGH/MID/LOW selectable

Linear matrix:
ON/OFF

Linear matrix MODE:
STANDARD/R Enhance/G Enhance/B
Enhance/Manual selectable

Partial Enhance:
ALL/IN/OUT selectable

CCD integration mode:
FIELD/FRAME selectable

Shading Compensation:
OFF/ON (Manual control)

Trigger Polarity:
Positive edge trigger /Negative edge
trigger selectable

Baud rate:
19200/9600/4800/2400/1200 selectable

Sync:
RGB/G/OFF selectable

Strobe:
ON/OFF

User File:
A/B switchable (Two pattern memories)

Scene File:
STANDARD/MICROSCOPE/FULL
AUTO/STROBE/FILE A or B

Output signal
VBS:
1.0 Vp-p, 75 Ω, sync negative
RGB:
0.7 Vp-p, 75 Ω, Sync ON/OFF possible

SYNC:
2 Vp-p, 75 Ω
Y:
1.0 Vp-p, 75 Ω
C:
0.3 Vp-p, 75 Ω, without sync

Operating temperature:
-5 to 45°C

Storage temperature:
-20 to 60°C

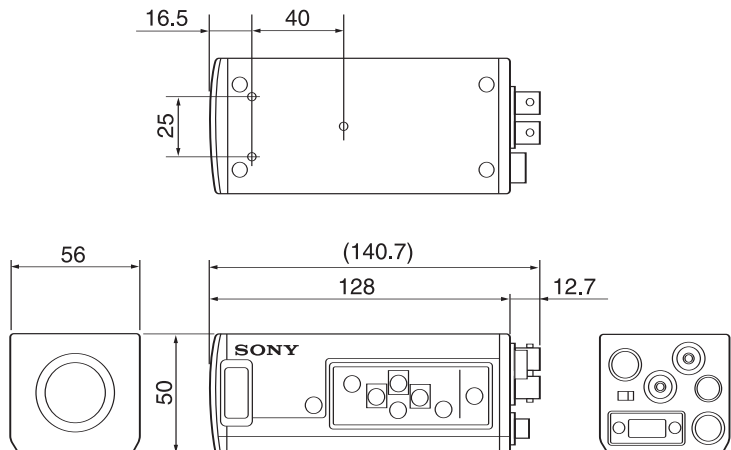
Power requirements:
DC 10.5 to 15.0 V

Power consumption:
Approx. 7.6 W

Dimensions:
56 (W) × 50 (H) × 128 (D) mm
(Excluding projecting parts)

Weight:
Approx. 370 g

Connectors:
Lens (6-pin)
RGB/SYNC (9-pin D-sub)
DC IN/VBS (12-pin)
VIDEO OUT (BNC)
TRIGGER IN (BNC)
REMOTE (8-pin mini DIN)



DXC-990P 3-CCD Colour Video Camera

The DXC-990P is a 1/2 type 3-CCD colour video camera featuring a new DSP technology as well as Exwave HAD technology for excellent sensitivity (F11@2000 lux) and low vertical smear. Using a bayonet mount lens and providing a resolution of 850 TV lines and high S/N ratio (62 dB), the DXC-990P is ideal for applications such as semiconductor inspection, printing inspection and microscopy, where picture accuracy and detail are important. All functions are easily controlled from the camera's rear panel with an optional RM-C950 Remote Control Unit or an external computer via an RS-232C interface. Multiple component, RGB, Y/C and composite video signal outputs allow the DXC-990P to be integrated into virtually any industrial video system. Optional adapters and couplers are available for mounting onto various types of microscopes.

Features

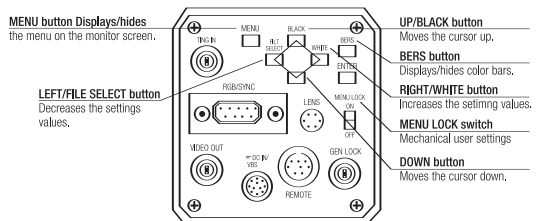
- New Digital Signal Processing (DSP) technology for powerful picture contrast controls
- Partial Enhance
- DynaLatitude
- DCC+
- High Sensitivity (F11@2000 lux)
- Y/C, RGB, Y/R-Y/B-Y, and composite video signal outputs
- Linear matrix, shading compensation, master pedestal and gamma selection
- Flash synchronisation function
- Full colour genlock
- CCD iris and adjustable window
- Auto Exposure
- Fixed, One-push, Manual and Automatic White Balance
- Colour shading matrix and painting connections
- Two set up memories
- Colour bar generator
- Cable extension up to 100 m with CMA-D3 adaptor

Supplied Accessories

Lens mount cap (1)
 Stopper mount (1)
 Operation manual (1)
 Panel sheet for RM-950 (1)

Optional Accessories

CMA-D2CE Camera Adaptor
 CMA-D2MDCE Camera Adaptor
 CMA-D3CE Camera Adaptor
 CCXC-12 cables 12-pin/12-pin Multi Core Cables
 CCDC cables 12-pin/4-pin DC Cables
 CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin
 CCMC-3MZ Cable
 RM-C950 Remote Control Unit
 VCL-0716BXA 1/2 Type Bayonet Mount Lens



Sensor Cameras

Specifications

Image device:
1/2 type IT (Interline Transfer) Exwave CCD (x3)

Effective picture elements:
752 (H) x 582 (V)

Sensing area:
6.4 x 4.8 mm

Horizontal frequency:
15.734 kHz

Vertical frequency:
59.94 Hz

Sync sytem:
Internal or external with VBS, HD/VD

Horizontal resolution:
850 TV lines

Sensitivity:
F11 (2000 lux)

Minumum illumination:
1 lux (F1.4, GAIN: HYPER)

S/N ratio:
62 dB

Gain:
STEP/AGC (0 to 24 dB)/HYPER

Shutter speed:
0.5 to 1/100,000 s

Lens mount:
Bayonet mount

AE area:
Multi/Large/Medium/Spot/Slit/Manual

AE level:
Variable

AE speed:
Fast/Mid/Slow selectable

AE detect:
Average/Peak selectable

Contrast effect:
Manual/DynaLatitude/DCC+ selectable

Knee point:
High/Normal/Low selectable

Black stretch:
Variable

Gamma:
On/Off

Pedestal:
Master, R/B manual adjustable

Black balance:
ABB

White balance:
AWB/ATW normal/ATW wide/Manual/3200 K/5600 K selectable
AWB or ATW R/B paint, manual R/G gain

ATW area:
Normal/Manual

ATW speed:
Slow/Mid/Fast

Detail level:
On (Variable)/Off

Detail frequency:
High/Mide/Low

Linear matrix:
On/Off

Linear matrix code:
STANDARD/R Enhance/G Enhance/B Enhance/Manual selectable

Partial enhance:
All/In/Out

CCD integration mode:
Field/Frame

Shading compensation:
On/Off (manual)

Trigger polarity:
Positive edge trigger/Negative edge trigger selectable

Baud rate:
19200/9600/4800/2400/1200

Sync:
RGB/G/OFF

Trigger:
On/Off

User file:
A/B

Scene file:
Standard/Microscope/Full Auto/Strobe/File A or B

Output signals:
VBS, RGB/SYNC, Y/C, Y/R-Y/B-Y

Serial data:
RS-232C

Operational temperature:
-5 to 45°C (23 to 113°F)

Storage temperature:
-20 to 60°C (-4 to 140°F)

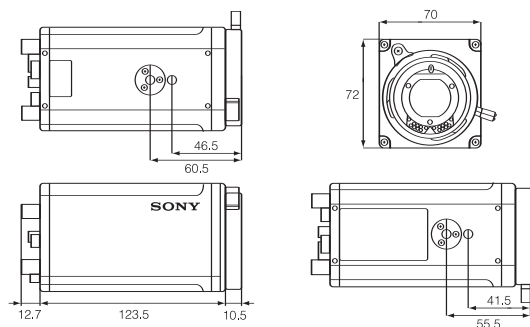
Power requirements:
DC 10.5 to 15.0 V

Power consumption:
Approx. 8.0 W

Dimensions:
70 x 72 x 123.5 mm (2 7/8 x 2 7/8 x 4 7/8 inches)

Mass:
630 g (1 lb 6 oz)

Connectors:
RGB/SYNC (9-pin D-sub), DC IN/VBS (12-pin), VIDEO OUT (BNC), TRIGGER IN (BNC), REMOTE (8-pin mini DIN), GEN LOCK IN (BNC), LENS (6-pin)



DXC-C33P 3-CCD Colour Video Camera

Ideal for use in space-limited locations, the DXC-C33P incorporates one of the smallest/lightest camera head unit featuring three 1/3 type CCDs. In spite of its compact (32 (W) x 38 (H) x 40 (D) mm, 1 5/16 x 1 1/2 x 1 5/8 inches) and lightweight (48 g, 1.7 oz) camera head unit, this model inherits superb picture quality of the DXC Series. Its horizontal resolution is 850 TV lines and the high sensitivity is 2000 lux at F8. Also, various features such as DynaLatitude, Partial Enhance are provided to this model. First for the DXC Series and also first for 3-CDD small head cameras, the DXC-C33P is equipped with a DV output terminal. Thanks to the DV output terminal, video signals can be recorded to i.LINK interface-equipped VTR with no quality deterioration. With the excellent features and medical approval, the DXC-C33P is the right choice for medical fields, and also for demanding applications such as research and industrial fields.



Features

- Small camera head •High picture quality •i.LINK DV out
- 10-bit DSP •DynaLatitude •Frame memory •Partial Enhance
- User-friendly control panel •Two AE areas preset
- RS-232C interface •External synchronisation (HD/VD, VBS)

Supplied Accessories

Tripod adaptor (1)
AC power cable (1)
Lens cap (1)
Panel sheet for RM-C950 (1)
Operation manual (1)

Optional Accessories

RM-C950 Remote Control Unit
CCMC-20 cables 20-pin/20-pin Cable
CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin

Sensor Cameras

Specifications

Image device:
1/3 type IT (Interline Transfer) CCD (x3)

Effective picture elements:
752 (H) x 582 (V)

Sensing area:
4.8 (H) x 3.6 (V) mm

Scanning system:
2:1 interlaced, 625 lines

Horizontal frequency:
15.625 kHz

Vertical frequency:
50 Hz

Sync system:
Internal or external with VBS or HD/VD

Phase control:
H/SC phase control

Horizontal resolution:
850 TV lines

Lens mount:
C mount

Flange back:
17.526 mm in air

Sensitivity:
F8.0 at 2000 lux (3200 K)

Minimum illumination:
4 lux (F2, GAIN: HYPER)

S/N ratio:
61 dB (Typical)

Gain
STEP/AGC/HYPER selectable
STEP:
0 to 24 dB by 1 dB step
AGC:
0 to 24 dB (Limit value: 6 dB, 12 dB,
18 dB, 24 dB selectable)
HYPER:
30 dB

Electronic shutter:
8.0 to 1/100,000 s

Lens:
Manual Iris

AE area:
Multi/Large/Medium/Spot/Slit/Manual
selectable

AE level:
Variable

AE speed:
Fast/Mid/Slow selectable

AE detect:
Average/Peak selectable

Contrast effect:
Manual/DynaLatitude/DCC+ selectable

Knee point:
High/Normal/Low selectable
(Contrast Effect: Manual)

Black stretch:
Variable (Contrast Effect: Manual)

Gamma:
ON/OFF (Variable at ON)

Pedestal:
Master and R/B Manual adjustable

Black balance:
ABB

White balance:
AWB/ATW NORMAL/ATW
WIDE/MANUAL/3200 K/5600 K selectable
AWB or ATW R/B Paint, MANUAL R/B Gain

ATW area:
NORMAL/MANU selectable

ATW speed:
FAST/NORMAL/SLOW selectable

Detail level:
ALL/TARGET/OFF (Variable at ALL or
TARGET)

Detail frequency:
HIGH/MID/LOW selectable

Linear matrix:
ALL/TARGET/OFF

Linear matrix mode:
STANDARD/R Enhance/G Enhance/B
Enhance/Manual selectable

Partial enhance:
ALL/IN/OUT selectable

CCD integration mode:
FIELD/FRAME selectable

Shading compensation:
OFF/ON (Manual control)

Trigger polarity:
Positive edge trigger/Negative edge trigger
selectable

Baud rate:
19200/9600/4800/2400/1200 selectable

Sync:
RGB/G/OFF selectable

Strobe:
Slave

User file:
A/B switchable
(Two pattern memories)

Scene file:
STANDARD/MICROSCOPE/FULL
AUTO/STROBE/FILE A or B

Output signal
i.LINK (DV):
IEEE1394 Based

VBS:
1.0 Vp-p, 75 Ω , sync negative

RGB:
0.7 Vp-p, 75 Ω , sync switchable

SYNC:
2 Vp-p, 75 Ω

Y:
1.0 Vp-p, 75 Ω

C:
PAL 0.3 Vp-p, 75 Ω , without sync

Operating temperature:
-5 to 45°C (23 to 113°F)

Storage temperature:
-20 to 60°C (-4 to 140°F)

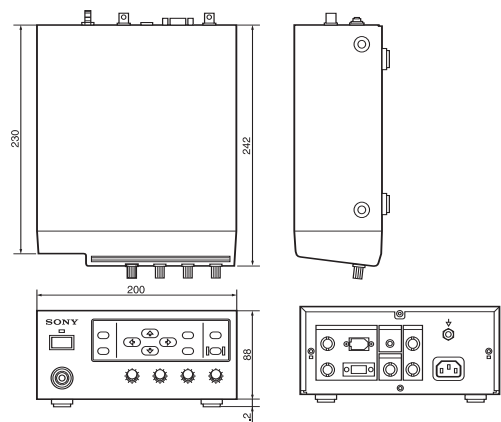
Power supply:
AC 100 to 240 V, 50/60 Hz

Power consumption:
Max. 18 W

Dimensions
CHU: 32 (W) x 38 (H) x 40 (D) mm
(1 5/16 x 1 1/2 x 1 5/8 inches)
CCU: 200 (W) x 88 (H) x 242 (D) mm
(7 7/8 x 3 1/2 x 9 5/8 inches)

Mass
CHU: 48 g (1.7 oz)
CCU: 2.5 kg (5 lb 8 oz)

Connectors:
DV OUT (6-pin jack)
RGB/SYNC (9-pin D-sub)
VIDEO OUT (BNC)
S-VIDEO (4-pin mini DIN)
FS/TRIG IN (Stereo Mini jack)
REMOTE (8-pin mini DIN)
AC Inlet
Camera (20-pin)



SONY

Camera Accessories & Peripherals

BKP-9057	38	RCP-750	66
BRBK-301	39	RCP-751	66
BRBK-302	39	RCP-D50	67
BRBK-303	39	RCP-D51	67
BRBK-304	39	RM-BR300	68
BRBK-H700	39	RM-C950	68
BRU-H700	40	RMM-301	68
BRU-300	40	VCL-0716BXA	69
BVF-55CE	41	VCL-616WEA	69
BVF-20WCE	41	VCS-700	70
BVF-77CE	42	VCT-U14	71
CA-590P	43	VFH-550	72
CA-553	43	VFH-770	72
CA-905F	44	WLL-CA50	73
CA-D50	45	WLL-CA55	74
CA-TX50P	46	WLL-RX55	75
CA-WR855	47		
CAC-12	48		
CAC-4	48		
CCU-590P	49		
CCU-790P	50		
CCU-D50P	51		
CCU-TX50P	52		
CMA-D2	53		
CMA-D2MDCE	54		
CMA-D3CE	55		
DXF-20W	56		
CNU-700	56		
DXF-51	57		
HDVF-C30W	58		
HFBK-XG1	59		
HFBK-TS1	59		
HFBK-SD1	59		
HFBK-HD1	59		
HKCU-1005	60		
HKCU-1003	60		
HKCU-1001	60		
LC-DS300SFT	61		
LC-H300	61		
LC-HB330	61		
LO-23	62		
LO-26	62		
LCR-1	62		
MSU-900	63		
MSU-950	64		
RCP-701	65		
RCP-700	65		

BKP-9057 Viewfinder Saddle

Features

- For mounting 7-inch type viewfinder (BVF-77/77CE), on the CA-905K/905F/905L
- Flexible panning
- Easy handling

*When the BKP-9057 is used, 'Picture in Picture' function of the seven-inch viewfinder does not work.

Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera

BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

Installation manual (1)

MS-59/60 board (1)

VF connector cable (1)

Harness (1)

Mounting screws (1)

Specifications

Dimensions:

368 (W) x 373 (H) x 534 (D) mm
(14 1/2 x 14 3/4 x 21 1/8 inches)
(with CA-905, without viewfinder)

Mass:

2.3 kg (5 lb 1 oz)

Connectors:

Viewfinder 20-pin (to camera)

Viewfinder 25-pin (to VF)

Panning degree:

BVP-E30P/WSP:

$\pm 30^\circ$

(After the BKP-9057 is moved 20 mm backward and 20 mm upward, it will become $\pm 90^\circ$)



BRBK-301 Analogue/RGB Component Card

Allows an analogue/RGB component output for the BRC-300/BRU-300

Applicable Models

BRC-300 3-CCD Colour Video Camera
BRU-300 Optical Multiplex Unit



BRBK-302 SDI Card

Allows a SDI output for the BRC-300/BRU-300

Applicable Models

BRC-300 3-CCD Colour Video Camera
BRU-300 Optical Multiplex Unit



BRBK-303 Optical Multiplex Card

Allows video output, external synch, and control for the BRC-300

Applicable Models

BRC-300 3-CCD Colour Video Camera



BRBK-304 DV Card

Allows a DV output for the BRC-300/BRU-300

Applicable Models

BRC-300 3-CCD Colour Video Camera



BRBK-H700 HD Optical Multiplex Card

HD Optical Multiplex Card for use with BRC-H700 HD 3CCD Colour Video Camera

Applicable Models

BRC-H700 HD 3CCD Colour Video Camera



BRU-300 Optical Multiplex Unit

Features

- The BRU-300 converts uncompressed digital data from the BRC-300 3CCD Colour Video Camera (with the optional BRBK-303 Optical Multiplex Card) into various video outputs.

Applicable Models

BRC-300 3-CCD Colour Video Camera

Supplied Accessories

AC power cable (1)
Terminal connector (1)
RS-232C cable (1)
Operating instructions (1)

Optional Accessories

RM-BR300 Remote Control Unit
BRBK-301 Analogue/RGB Component Card
BRBK-302 SDI Card
CCFC-M100 Optical Fibre Cable



BRU-H700 HD Optical Multiplex Unit

Features

The BRU-H700 is an HD optical multiplex unit for use with the BRC-H700 HD 3CCD colour video camera. Uncompressed digital data including external sync, camera control and audio signals can be transmitted via the BRU-H700 when used with the BRBK-H700 HD optical multiplex card installed in the BRC-H700.

Applicable Models

BRC-H700 HD 3CCD Colour Video Camera

Supplied Accessories

AC power cable (1)
Operating instructions (1)
RS-232C cable (1)
RS-422 terminal block connector (1)

Specifications

Optical fibre connector
Multi mode, LC-type Fibre Connector
Video output (Built-in)
Analogue RGB, Analogue Y/Pb/Pr
HFBK-HD1 : HD-SDI,
HFBK-SD1 : Down converted SD
(RGB, Y/Cb/Cr, Y/C, Composite, SDI x2)
Video output (With optional card : slot x2)
HFBK-XG1 : WXGA, XGA, VGA,
HFBK-TS1 : HDV

Camera control interface
RS-232C/RS-422 (VISCA protocol)
Sync systems
Internal/External
Multiple connection
Up to 7 Units
Operating temperature
0 to 40 degrees (32 to 104 °F)
Storage temperature
-20 to 60 degrees (-4 to 140 °F)
Power requirements
59.94 i : AC 100 to 120 V (50/60 Hz)
50 i : AC 220 to 240 V (50/60 Hz)

Power consumption
Max. 10 W (without optional cards)
Dimensions (WxHxD)
210 (W) x 240 (D) x 86 (H) mm
(8 3/8 x 9 1/2 x 3 1/2 inches)
Mass
2.7 kg (5 lb 15 oz)



BVF-20WCE 2-inch Type 16:9 B/W Viewfinder

Features

- 2-inch type 16:9 widescreen B/W CRT viewfinder for the portable camera
- High resolution-600 TV lines at centre in both 16:9 and 4:3 modes
- Diagonal size is 1.5-inch in 4:3 mode and 2.0-inch in 16:9 mode to ensure easy focusing even in 16:9 mode
- The eye-piece is removable from the viewfinder to allow direct view of the CRT
- Tally indicators on both front and rear of the viewfinder as well as on the screen of the viewfinder
- Supplied with a new external microphone



Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera
DWW-970P Digital Betacam Camcorder
MSW-970P MPEG IMX Camcorder

Supplied Accessories

Operation manual (1)

Optional Accessories

BKW-401 Viewfinder Rotation Bracket

Specifications

General

Power requirements:
9.3 V DC
Power consumption:
2.3 W
Operating temperature:
-20°C to +45°C (-4°F to +113°F)
Storage temperature:
-20°C to +60°C (-4°F to +140°F)
External dimensions:
229(W) x 76(H) x 215(D) mm
(9 1/2 x 3 x 8 1/4 inches)
Mass:
580 g (1 lb 4 oz)

Performance

CRT:
2-inch monochrome
Horizontal resolution:
600 TV lines (at centre)
Indicators:
REC/TALLY, BATT, VTR, SAVE, ! (warning)
Compensation for aberrations:
-3.6D to +0.4D

BVF-55CE 5-inch Type B/W Viewfinder (CCIR)

Features

- 650 TV lines of resolution at centre
- High brightness—600NIT
- Adjustable centre position marker with ON/OFF switch
- Panning and tilting facility
- Easy installation and handling



Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

Connecting cables (12-pin - 20-pin) (1)
Slide shoe (1)
V wedge shoe attachment (1)
Screws (1)
Monitor hood for studio use (1)

Specifications

General

Operating temperature:
-10 to +50 °C (+14 to +122 °F)
Mass:
1.9 kg (4 lb 3 oz)

External dimensions:
191(W) x 188(H) x
291(D)mm
(7 5/8 x 7 1/2 x 11 1/2 inches)

Performance

Screen size:
73(H) x 97(W)mm underscan
(2 7/8 x 3 7/8 inches)
Power requirements:
DC 12 V
Power consumption:
10 W
Resolution:
650 TV lines at centre
550 TV lines at corners
Picture distortion:
Less than 3%



BVF-77CE 7-inch Type B/W Viewfinder (CCIR)

Features

For use with BVP-E30 series cameras in conjunction with CA-905F large lens adaptor and BKP-9057 viewfinder saddle

- Compact size with reduced height, light weight and low power consumption
- Wide range of mechanical positioning and fixed centre of gravity
- Extremely high centre resolution of 800 TV lines and wide peaking range contribute to a very crisp image and accurate focusing
- Large, very easy to see tally lamps
- Underscan display



Applicable Models

CA-905F plus BKP-9057

Specifications

General

Power requirements:

DC 10.5 to 17.0 V DC 12.0 (typical)

Power consumption:

23 W

Mass:

5.0 kg (11 lb)

External dimensions:

265(W) x 178(H) x 321(D)mm

(10 1/2 x 7 1/8 x 12 3/4 inches)

Performance

CRT:

7-inch 90-degree deflection

Screen size:

120(H) x 90(D) mm (normal)

(4 3/4 x 3 5/8 inches)

Tilting angle:

+60°/-40°

Brightness:

More than 500cd/m² (146fL)

Resolution:

800 lines (centre)

600 lines (corner)

Geometric distortion:

Within 1.0%

Linearity:

Within 3%

Stability of raster size:

Within 2%

Controls:

Contrast/Brightness/Peaking

Peaking SW/Power

SW Scan Size SW

Aperture correction:

0 to 15 dB



CA-553 Camcorder Adaptor

Betacam 50-pin Interface Adaptor

Features

- Interface adaptor to connect cameras to BVV-5 Betacam SP dockable VTR



Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

Carrying handle (1)
Operation manual (1)
Maintenance manual (1)
M4 screw (1)
+B4x5 screw (1)
Plate (1)

Specifications

Input/output connector:
68-pin (1)
50-pin (1, for video/audio control signal, power transmission)
Power requirements:
DC 12 V
Power consumption:
0.3 W
Operating temperature:
-20 to +45°C (-40 to +113°F)
Storage temperature:
-20 to +60°C (-40 to +140°F)

Dimensions:

119 (W) x 179 (H) x 33 (D) mm
4 3/4 x 7 1/8 x 1 5/16 inches
Mass:
350 g (12.3 oz)

CA-590P Camera Adaptor

The CA-590P is a triax camera adaptor used to connect the BVP-E30P/E30WSP series cameras to the CCU-790P/590P Camera Control Unit.

Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera
CCU-590P Portable Camera Control Unit
CCU-790P Camera Control Unit

Supplied Accessories

Triax cable holder
Carrying belt
M3 x 6 screw
Operation manual

Optional Accessories

CCA-5 Cables 8-pin/8-pin Remote Control Cable



CA-905F Large Lens Adaptor (Fischer Type)

Features

- Adaptor to attach a large lens to portable cameras
- Compact and lightweight
- Easy lens attachment and detachment
- Vertical/horizontal adjustment
- Stabilising mechanism for complete matching with the lens mount and the camera position
- Combined use with 7-inch type viewfinder (with BKP-9057 viewfinder saddle) provides a wide range of applications

*CA-905 can not be used in the following combination of a viewfinder and a CCU —CA-905+BVF-7700/7700P and CCU-550A/550AP



Lens, camera, camera adaptor, viewfinder, VF saddle, tripod are optional

Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

Number plate (2)
Cable clamp (2)
Operation manual including BKP-9057 operation (1)
Maintenance manual part 1 (1)

Specifications

General

Power Consumption:
90 W (w/ lens, VF and BKP-9057)
Operation temperature:
-20 to + 45 °C (-4 to 113°F)
Storage temperature:
-20 to + 55°C (-4 to 130°F)
Mass:
12 kg (26 lb 7 oz)
Dimensions:
368 x 327 x 534 mm
(14 1/2 x 12 7/8 x 21 1/8 inches)

Connectors

CCU:
Triax (Fischer type)
Lens:
12-pin (to camera)
Lens:
36-pin (to lens)
Command:
8-pin (to camera)

CA-D50 Camera Adaptor

Features

- Camera Adaptor for use with the CCU-D50/D50P Camera Control Unit. •Dockable to Sony DXC cameras that employ the 76-pin digital connector •Interfaces with 26-pin equipped Sony portable VTRs •Interfaces with the BKP-L551 Battery Adaptor with the appropriate service part.(*)

(*)Please contact your nearest Sony office.

Applicable Models

DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera

Supplied Accessories

Operation manual (1)

Optional Accessories

CCZ-A Cables 26-pin/26-pin Cable

Specifications

General

Power requirements:

DC 12 V

Power consumption:

Approx. 3.8 W

Operating temperature:

-10°C to 45°C (14°F to 113°F)

Storage temperature:

-20°C to 55°C (-4°F to 131°F)

Dimensions:

113 (W) × 183 (H) × 168 (D) mm

(7 1/4 × 4 1/2 × 6 5/8 inches)

Mass:

1.1 kg (2 lb 7 oz)

Input/Output connectors

Camera interface:

Pro 76-pin DIGITAL (1)

CCU/VTR/CMA:

Sony Z-type 26-pin (1)

SDI output:

BNC (1), 270 Mb/s, 0.8 Vp-p, 75 Ω

Genlock/Prompter output:

BNC (1), 1.0 Vp-p, 75 Ω

Earphone

Mini jack

Intercom:

Mini intercom jack

DC input:

XLR 4-pin (1), 10.5 to 17.0 V



CA-TX50P Camera Adaptor

The CA-TX50P is a triax camera adaptor for use with the DXC-D50P series portable video cameras for connection with the CCU-TX50P Triax Camera Control Unit.



Applicable Models

CCU-TX50P Camera Control Unit
DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera

Supplied Accessories

Operation manual (1)

Optional Accessories

AC-DN10 AC Adaptor/Charger
WRR-861A UHF Synthesised Diversity Tuner (AU)
WRR-862A UHF Synthesised Dual Diversity Tuner (AU)
DXF-51 5-inch Monochrome Viewfinder

Specifications

Power requirements:

DC 12 V (DC 180 V when supplied via the CCU connector)

Power consumption:

CA (Internal): 7.3 W
Max. 58 W (DC 12 V input)
Max. 67 W (DC 180 V input)

Operating temperature:

-10 °C to 45 °C (14 °F to 113 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Mass:

Approx. 2.5 kg (5 lb 5 oz)

Dimensions (W x H x D):

206 x 212 x 131 mm
(8 1/8 x 8 3/8 x 5 1/4 inches)

Signal inputs/outputs

CCU:

Triax (Fischer type)

CAMERA:

Pro 76-pin Digital

PROMPTER:

BNC type, 1.0 Vp-p, 75 Ω

RETURN:

BNC type, 1.0 Vp-p, 75 Ω

INTERCOM/PROGRAM:

XLR 5-pin (for Headset)

Input level: -60 dBs (dynamic)
Output level: $-\infty$ to +12 dBs

AUDIO IN (CH-1/2):

XLR 3-pin (2), 600 Ω , balanced
Input level:
Mic in: -60 dB
Line in: -20 dB

DC IN:

XLR 4-pin, 10.5 V to 17 V

DC OUT:

4-pin, 10.5 V to 17 V, Max 1.5 A

EARPHONE

Mini jack

CA-WR855 Camera Adaptor

Features

- Allows a WRR-855A/855B to be mounted on Sony DSR-450WSP/400P DVCAM camcorders
- Direct audio/power connection interfaces

Applicable Models

WRR-855B UHF Synthesised Diversity Tuner (6668U)



CAC-12 Camera Microphone Holder

Features

- Allows microphone direction to be adjusted
- For attaching the ECM-647/670 or the C-74 condensor microphone to cameras and camcorders

Applicable Models

DSR-250P/1 DVCAM Camcorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DSR-450WSPL DVCAM Camcorder
DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera



CAC-4 Chest Pad

Features

- Provides more stable camera operation
- Attachable to the VCT-U14/C tripod adaptors directly

Specifications

Mass:

Approx. 185 g (7 oz)



CCU-590P Portable Camera Control Unit

Features

- Wideband transmission (10 MHz for Y and 14.5 MHz for R-Y/B-Y) •Long-distance transmission - up to 1400 m via a 14.5 mm dia. cable •Three SDI or analogue composite outputs •One component output (Y/R-Y/B-Y or G/R/B)
- Four inputs for return video (RET-1/2: analogue composite, RET-3/4: SDI) •Built-in Ethernet interface (100Base-T) for future use •RM-B750 Remote Control Unit attachable on the front panel •Teleprompter support
- Support for two-channel intercom systems (four-wire/ RTS/Clearcom) •Two-channel program audio
- Two-channel microphone system (two XLR connectors)



Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

AC power cord
AC power plug holder
4-pin connector
Number plate
Operation manual

Optional Accessories

CA-590P Camera Adaptor
CCA-5 Cables 8-pin/8-pin Remote Control Cable
RMM-301 Rack Mounting Bracket
RM-B750 Remote Control Unit

Specifications

General

Power requirements
AC 100 to 240 V, 50/60 Hz, maximum 1.8 A
Operating temperature
-10 to +40 °C (+14 to +104 °F)
Dimensions (W x H x D)
200 x 124 x 365 mm
(7 7/8 x 5 x 14 1/4 inches)

Mass
Approx. 5.5 kg (12 lb 2 oz)

Signal inputs

Reference
BNC (loop-through),
VBS/BS, 1.0 Vp-p, 75Ω
Return (1, 2) ^(*)
BNC(loop-through), VBS, 1.0 Vp-p, 75 Ω
SDI return (3, 4)
BNC, SDI/VBS selectable
VBS: 1.0 Vp-p, 75 Ω, SDI: SMPTE 259M
Prompter ^(*)
BNC (loop-through), VBS, 1.0 Vp-p, 75 Ω

Signal outputs

VBS/SDI
BNC (x3), VBS/SDI selectable
VBS: 1.0 Vp-p, 75 Ω, SDI: SMPTE 259M
Analogue component
BNC (x3 for 1 set), Y/R-Y/B-Y or
G/R/B switchable
Y: 1.0 Vp-p, 75 Ω, R-Y/B-Y: 525 m Vp-p,
75 Ω, R/G/B: 700 mVp-p, 75 Ω
PIX
BNC, 1.0 Vp-p, 75 Ω
WF
BNC, 1.0 Vp-p, 75 Ω, 700 mVp-p, 75 Ω
WF mode
4-pin
Audio
XLR-3-pin (x2), 0 dBu/-20 dBu, balanced
Sync
BNC, 0.3 Vp-p, 75 Ω

Camera input/output signals

Camera
Triax
Coax
BNC, 75 Ω
Remote
8-pin
Ethernet
IEEE 802.3 10BASE-T,
IEEE 802.3u 100BASE-TX
Intercom/tally/program
D-sub 25-pin
4W/RTS
Tally: DC 24 V, TTL level or contact
selectable
Microphone remote
D-sub 15-pin
Intercom (front)
XLR-5-pin

CCU-790P Portable Camera Control Unit

Features

- Wideband transmission (10 MHz for Y and 4.5 MHz for R-Y/B-Y) •Long-distance transmission - up to 2000 m via a 4.5 mm dia. cable •Three SDI or analogue composite outputs •Up to three additional SDI outputs (•)
- One component output (Y/R-Y/B-Y or G/R/B)
- Four inputs for return video (RET-1/2: analogue composite, RET-3/4: SDI) •Built-in Ethernet interface (100Base-T) for future use •Teleprompter support
- Support for two-channel intercom systems (four-wire/RTS/Clearcom) •Two-channel program audio
- Two-channel microphone system (two XLR connectors)



Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

AC power cord
AC power plug holder
4-pin connector
Number plate
Operation manual

Optional Accessories

CA-590P Camera Adaptor
CCA-5 Cables 8-pin/8-pin Remote Control Cable

Specifications

General

Power requirements
AC 110 to 120 V/220 to 240 V, 50/60 Hz
Operating temperature
0 to +45 °C (+32 to +113 °F)
Dimensions (W x H x D)
424 x 133 x 394 mm
(16 3/4 x 5 1/4 x 15 5/8 inches)
Mass
Approx. 12 kg (26 lb 7 oz)

Signal inputs

Reference
BNC (loop-through), VBS/BS,
1.0 Vp-p, 75 Ω
Return (1, 2) ^(*)
BNC(loop-through), VBS, 1.0 Vp-p, 75 Ω
SDI return (3, 4)
BNC, SDI/VBS selectable
VBS: 1.0 Vp-p, 75 Ω SDI: SMPTE 259M
Prompter ^(*)
BNC (loop-through), VBS, 1.0 Vp-p, 75 Ω

Signal outputs

VBS/SDI
BNC (x3), VBS/SDI selectable
VBS: 1.0 Vp-p, 75 Ω SDI: SMPTE 259M
SDI
BNC (x3) ^(*)
Analogue component
BNC (x3 for 1 set), Y/R-Y/B-Y or
G/R/B switchable
Y: 1.0 Vp-p, 75 Ω,
R-Y/B-Y: 525 mVp-p, 75 Ω,
R/G/B: 700 mVp-p, 75 Ω
PIX
BNC, 1.0 Vp-p, 75 Ω
WF
BNC, 1.0 Vp-p, 75 Ω, 700 mVp-p, 75 Ω
WF mode
4-pin
Audio
XLR-3-pin (x2), 0 dBu/-20 dBu, balanced
Sync
BNC, 0.3 Vp-p, 75 Ω
Camera input/output signals
Camera
Triax
Coax
BNC, 75 Ω
Remote
8-pin
Ethernet
IEEE 802.3 10BASE-T,
IEEE 802.3u 100BASE-TX
Intercome/tally/program
D-sub 25-pin
4W/RTS
Tally: DC 24 V, TTL
level or contact selectable
Microphone remote
D-sub 15-pin
Intercom (front)
XLR-5-pin

CCU-D50P Camera Control Unit

Features

- Interfaces with Sony DXC-D50P Series digital cameras via its associated CA-D50 Camera Adaptor.
- The output of the CA-D50 Camera Adaptor is transferred to the CCU-D50P Camera Control Unit as a component digital SDI(*1) signal via a Sony CCZ-A 26-pin cable up to 75 m long.
- The distance between the CA-D50 Camera Adaptor and CCU-D50P Camera Control Unit can be extended to a maximum 200 m by providing a separate low loss coaxial video cable to carry the SDI signal between the two units.
- Outputs analogue composite and one of the following: component digital SDI, analogue component (Y/R-Y/B-Y or RGB), or S-video(*2).
- Flexible intercom connectivity allows the interfacing of 2-wire or 4-wire systems.
- Green tally indication included for use in mid to large-scale camera operations.
- The RCP-D50 can be connected to the CCU-D50P.

(*1) Embedded audio is not supported. (*2) Available output signals depend on the connected camera or camcorder.



Applicable Models

DXC-D50PH 3-chip CCD Portable Colour Camera
 DXC-D50PK 3-chip CCD Portable Colour Camera
 DXC-D50PL 3-chip CCD Portable Colour Camera
 DXC-D50WSPL 3-chip CCD Portable Colour Camera

Supplied Accessories

AC power cord (1)
 Rack mount adaptor (2)
 Rack mount screw (4)
 Tally indication segment (1)
 Operation manual (1)

Optional Accessories

RCP-D50 Remote Control Panel
 RCP-D51 Remote Control Panel
 CCZ-A Cables 26-pin/26-pin Cable

Specifications

General

Power requirements:
 AC 200/240 V, 50/60 Hz
 Power consumption:
 Approx. 0.8 A
 Operating temperature:
 5°C to 40°C (41°F to 104°F)
 Storage temperature:
 -20°C to 55°C (-4°F to 131°F)
 Dimensions:
 424 (W) × 88 (H) × 283 (D) mm
 (16 3/4 × 3 1/2 × 11 1/4 inches)
 Mass:
 6.3 kg (13 lb 14 oz)

Input/Output connectors

VBS output:
 BNC (2) 1.0 Vp-p, 75 Ω

R/G/B output:

BNC (1) 0.7 Vp-p, 75 Ω

Y/R-Y/B-Y output:

BNC (1), Y: 1.0 Vp-p, 75 Ω, R-Y/B-Y: 0.525 Vp-p, 75 Ω

Y/C output:

BNC (1) Y: 1.0 Vp-p, 75 Ω, C: 0.3 Vp-p, 75 Ω

SYNC output:

BNC (1), 0.3 Vp-p, 75 Ω

SDI output:

BNC (2), 270 Mb/s, 0.8 Vp-p, 75 Ω

S-Video output:

DIN 4-pin (1), Y: 1.0 Vp-p, 75 Ω, C: 0.3 Vp-p, 75 Ω

Monitor output:

BNC (1) VBS:1.0Vp-p, 75Ω

Mic output:

XLR 3-pin (1), 600Ω

Genlock input:

BNC (1), loop-through, VBS or BBS, 1.0 Vp-p, 75Ω

SDI input:

BNC (1), 270 Mb/s, 0.8 Vp-p, 75 Ω

Return Video input:

BNC (1), loop-through, 1.0 Vp-p, 75 Ω

Prompter Video input:

BNC (1), loop-through, 1.0 Vp-p, 75 Ω

Camera:

Sony Z-type 26-pin (1)

Intercom/Tally:

D-sub 15-pin, 4W/2W selectable, R/G Tally, contact

Remote:

10-pin (1)

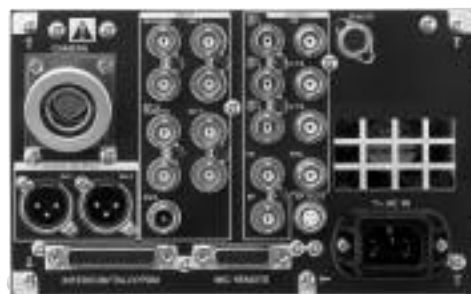
Control functions

Iris (auto/manual), White Balance (auto/manual/preset), Black balance (auto/manual/preset), Gain select (low/mid/high), R/B White, R/B Black, Master Black, Sub-carrier Phase, Horizontal Phase, Output Mode (colour bar/camera), Knee Point (auto/manual), Detail Level, Master Gamma, Tally/Intercom, Shutter Speed, Clear scan, ATW

CCU-TX50P Camera Control Unit

Features

- Compact design - half rack width and 3U height
- High quality data transmission
- Long distance transmission - up to 1500 metres via $\varnothing 14.5$ mm cable
- In addition to the component/RGB switchable output, three outputs switchable between composite video and SDI are provided
- Component video output (selectable from Y/R-Y/B-Y and R/G/B)
- Three return video inputs (One input is shared with prompter input)
- Colour teleprompter compatible
- Red/Green tally indication
- Support for major intercom systems (Four-wire/RTS/Clear-com)
- Program audio input
- Two-channel microphone outputs (two XLR connectors)



Applicable Models

DXC-D50PH 3-chip CCD Portable Colour Camera
 DXC-D50PK 3-chip CCD Portable Colour Camera
 DXC-D50PL 3-chip CCD Portable Colour Camera
 DXC-D50WSPL 3-chip CCD Portable Colour Camera
 CA-TX50P Camera Adaptor

Supplied Accessories

AC power cord (1)
 AC power plug holder (1)
 Plug holder for AC power cord (1)
 Rack mount adaptor (2)
 Rack mount screw (4)
 Number plate (1)
 Operation manual (1)

Optional Accessories

CA-TX50P Camera Adaptor
 RCP-D50 Remote Control Panel (Joystick Type)
 RCP-D51 Remote Control Panel (Dial Control Type)
 RMM-301 Rack Mounting Bracket

Specifications

Power requirements:
 AC 100 to 240 V, 50/60 Hz
 Power consumption:
 130 VA (measured at maximum load at camera side 12 V, 4.8 A, cable length 300 m)
 Peak inrush current
 (1) Power ON, current probe method: 50 A (240 V)
 (2) Hot switching inrush current, measured in accordance with European standard

DN55103-1: 10 A (230 W)
 Cable length:
 Max. 750 m (8.5 mm dia.)
 Operating temperature:
 5 °C to 40 °C (41 °F to 104 °F)
 Storage temperature:
 -20 °C to 55 °C (-4 °F to 131 °F)
 Mass:
 Approx. 5.5 kg (12 lb 2 oz)
 Dimensions (W x H x D):
 200 x 124 x 365 mm (8 x 5 x 13 7/8 inches)
 Signal inputs
 REFERENCE: BNC type, loop-through, VBS/BS, 1.0 Vp-p, 75 Ω
 RETURN VIDEO 1, 2, 3 (*1): BNC type, loop-through, 1.0 Vp-p, 75 Ω
 PROMPTER VIDEO (*1): BNC type, loop-through, 1.0 Vp-p, 75 Ω
 Signal outputs
 VBS 1, 2, 3 (*2): BNC type, 1.0 Vp-p, 75 Ω
 SDI 1, 2, 3 (*2): BNC type, 270 Mb/s, 0.8 Vp-p, 75 Ω
 Y/R-Y/B-Y (*3): BNC type, Y: 1.0 Vp-p, 75 Ω , R-Y/B-Y: 525 mVp-p, 75 Ω
 R/G/B (*3): BNC type, 0.7 Vp-p, 75 Ω
 SYNC: BNC type, 0.3 Vp-p, 75 Ω
 PIX: BNC type, VBS, 1.0 Vp-p, 75 Ω
 WF: BNC type, 700 mVp-p, 75 Ω
 Encoded output: 1.0 Vp-p, 75 Ω
 WF MODE: 4-pin
 AUDIO: XLR 3-pin, 0 dBu/-20 dBu, balanced, 2 channels
 Camera control inputs/outputs
 CAMERA: Triax (Fischer type)
 COAX: BNC type, 75 Ω
 REMOTE: 10-pin, multi connector

INTERCOM/TALLY/PGM: D-sub 25-pin, 4W/RTS/Clear-com selectable
 TALLY: DC 24 V, TTL level or contact selectable
 MIC REMOTE: D-sub 15-pin
 INCOM (on the front panel): XLR 5-pin

(*1) The same connector is shared for return-3 and teleprompter.
 (*2) The same connector is shared for composite and SDI.
 (*3) The same connector is shared for component and R/G/B.

CMA-D2 Camera Adaptor

Camera adaptor for DXC-990/390

Features

- Supplies DC power with a CCDC cable to cameras
- Transmits DC power and video/sync signals between the camera and the adaptor with a CCMC 12-pin cable
- Maximum cable length: 100 m with CCDC-100A cable/ 25 m with CCMC-12P25 cable •19-inch EIA standard rack mountable



Applicable Models

DXC-390 3-CCD Colour Video Camera

DXC-990 3-CCD Colour Video Camera

Supplied Accessories

AC power cord (1)

Operation manual (1)

Specifications

Connectors:

CAMERA (12-pin MULTI)

CAMERA (4-pin DIN)

VIDEO OUT (BNC)

S VIDEO OUT (Mini DIN 4-pin)

GEN-LOCK IN (BNC)

DC out:

13 V, 1.3 A

Power requirements:

AC 120 V, 50/60 Hz

Power consumption:

23 W

Dimensions:

210 (W) × 50 (H) × 200 (D) mm

(8 3/8 × 2 × 7 7/8 inches)

Mass:

1.1 kg (2 lb 7 oz)

CMA-D2MDCE Camera Adaptor

Camera adaptor for DXC-990P/390P

Features

- Supplies DC power with a CCDC cable to cameras
- Transmits DC power and video/sync signals between the camera and the adaptor with a CCMC 12-pin cable
- Maximum cable length: 100 m with CCDC-100A cable/ 25 m with CCMC-12P25 cable
- 19-inch EIA standard rack mountable
- Complies with medical safety standard



Applicable Models

DXC-990P 3-CCD Colour Video Camera

Supplied Accessories

AC power cord (1)

Operation manual (1)

Specifications

Connectors:

- CAMERA (12-pin MULTI)
- CAMERA (4-pin DIN)
- VIDEO OUT (BNC)
- S VIDEO OUT (Mini DIN 4-pin)
- GEN-LOCK IN (BNC)

DC out:

13 V, 1.3 A

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

24.5 W

Dimensions:

210 (W) × 50 (H) × 200 (D) mm

(8 3/8 × 2 × 7 7/8 inches)

Mass:

1.1 kg (2 lb 7 oz)

CMA-D3CE Camera Adaptor

Features

- Supplies DC power and transmits video/sync signal between the adaptor and the DXC-390P with CCZ-A cable and CCMC-3MZ cable
- Connects with optional RM-C950/8 remote control unit
- AC IN/DC IN

Applicable Models

DXC-390P 3-CCD Colour Video Camera

DXC-990P 3-CCD Colour Video Camera

Supplied Accessories

Operation manual (1)

AC cable (1)

Specifications

Connectors

- CAMERA (26-pin MULTI)
- VIDEO OUT (BNC)
- SYNC IN / OUT (BNC)
- TRIG INPUT (BNC)
- W. E OUTPUT (BNC)
- REMOTE (mini DIN 8 pin)

Power requirements:

- AC 100-240 V or
- DC (10.5 to 15.0 V)

Dimensions:

210 (W) × 44 (H) × 210 (D) mm



CNU-700 Camera Command Network Unit

Features

- High-speed data transmission rates — more than 500 kb/s between CNU and MSU/RCP/CCU and 35 kb/s between camera head and CCU
- Expandable system configuration — up to 12 cameras with one CNU-700 and one BKP-7930 installed
- Character display function in monochrome
- Bypass facility to maintain communication between the CCUs and RCPs in the event of a CNU malfunction or power loss

Supplied Accessories

AC power cord (1)
 Plug holder for the AC power cord (1)
 Operation manual (1)
 Maintenance manual (1)

Optional Boards

BKP-7930 Expansion Board
 BKP-7933 S-Bus Interface Board

Specifications

General

Power requirements:

AC 100 to 120 V, 50/60 Hz (For USA and Canada)
 AC 220 to 240 V, 50/60 Hz (For other countries)

Power consumption:

4.0 VA max.

Operating temperature:

0 to +45 °C (+32 to +113 °F)

Mass:

9.5 kg (20 lb 15 oz)

Dimensions:

424(W) x 132(H) x 400(D) mm
 (16 3/4 x 5 1/4 x 15 3/4 inches)

Input/output connectors

CCU 1 through 6:

8-pin multiconnector (1 each)

RCP 1 through 6:

8-pin multiconnector (1 each)

MSU:

8-pin multiconnector (1)

VCS:

8-pin multiconnector (1)

AUX 1 and 2:

8-pin multiconnector (1 each)

Character:

BNC type (2) video: 0.7 Vp-p, sync: 0.3 Vp-p

Reference:

BNC type (2) 0.3 Vp-p with loop-through output

RS-232C:

D-sub 9-pin (3)

AC input:

3-pin (1)



DXF-20W 2.0-inch Monochrome Viewfinder

Applicable Models

- Supplied with the PDW-F350 XDCAM HD camcorder as standard
- Also available as an option for the PDW-F330 XDCAM HD camcorder



DXF-51 5-inch Monochrome Viewfinder

Features

- High horizontal resolution of 650 TV lines
- Stable video image
- Bright and clear colour image
- Under Scanning capability
- Can operate either on EIA and CCIR signals systems with automatic selection
- 16:9/4:3 Automatic Aspect Ratio Selection
- The viewfinder aspect ratio of the DXF-51 is automatically switched between 16:9 and 4:3
- Two red REC tally lamps
- Green Tally Lamp which can be used as a second tally lamp for CCU operations
- 20-pin connector
- DIN 8-pin connector
- +/- 40 degrees of tilting is possible
- +/- 90 degrees of panning is possible
- Rugged and compact body



Applicable Models

DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DSR-450WSPL DVCAM Camcorder
 DXC-D50PH 3-chip CCD Portable Colour Camera
 DXC-D50PK 3-chip CCD Portable Colour Camera
 DXC-D50PL 3-chip CCD Portable Colour Camera
 DXC-D50WSPL 3-chip CCD Portable Colour Camera
 PDW-F350 XDCAM HD Camcorder
 PDW-F330 XDCAM HD Camcorder

Supplied Accessories

Hood (1)
 Operation manual (1)
 20-pin Cable (1)

Specifications

Picture tube:

5-inch monochrome, 70° deflection

Scanning system:

2:1 interlace, 625/50 or 525/59.94 switchable

Horizontal resolution:

650 TV lines (centre)

Camera connector:

20-pin or DIN 8-pin connector

Power requirements:

DC 12 V +5.0/-1.5 V (supplied from a camera)

Power consumption:

11 W

Operating temperature:

0°C to 40°C (32°F to 104°F)

Mass:

2.4 kg (5 lb 5 oz) with stand and hood

Dimensions:

202 (H) × 199 (W) × 217 (D) mm
 (8 × 7 7/8 × 8 5/8 inches)

including projecting parts and controls

202 (H) × 199 (W) × 289 (D) mm
 (8 × 7 7/8 × 11 1/2 inches)
 with stand and hood

HDVF-C30W Multi-format HD Colour LCD Viewfinder

Features

- For use with the HDC-1500 and HDW-F900R/750P/730S
- The high quality 2.7-inch type TFT colour LCD panel provides a high resolution of 960 pixels horizontally (equivalent to 540 TV lines) x 540 pixels vertically
- Accommodates multiple frame rates
- The 2x magnification function simplifies focus operation, especially when prime lenses are used
- Gray scale signals can be generated, allowing camera operators to easily adjust exposure to the appropriate level
- A detachable eyepiece design allows the user to directly view the LCD
- Light weight construction
- Very low power consumption



Applicable Models

HDW-730S HDCAM Camcorder
 HDW-750P HDCAM Camcorder
 HDW-F900H HDCAM Camcorder
 HDC-1500 HD Portable Camera

Supplied Accessories

Operation manual (1)
 Connecting cable (1)

Specifications

General

Power supply:

DC 10.5 to 17.0 V (supplied by the camera)

Power consumption:

5.2 W

Operating temperature:

0 °C to 45 °C (32 °F to 115 °F)

Storage temperature:

- 20 °C to 60 °C (- 4 °F to 140 °F)

Mass:

850 g (1 lb 14 oz)

LCD

2.7-inch type colour TFT screen

Image display area dimensions:

59.04 (H) x 33.21 (V) mm (2 3/8 x 1 5/16 inches)

Performance

Brightness:

300 cd/m²

Resolution:

500 or more lines

Supported formats:

Effective scanning lines/Format/Horizontal
 scanning frequency/Vertical scanning frequency
 1080/23.98PsF/26.97 kHz/47.95 Hz
 1080/24PsF/27 kHz/48 Hz
 1080/25PsF/28.13 kHz/50 Hz
 1080/29.97PsF/33.72 kHz/59.94 Hz
 1080/30PsF/33.75 kHz/60 Hz
 1080/50i/28.13 kHz/50 Hz
 1080/59.94i/33.72 kHz/59.94 Hz
 1080/60i/33.75 kHz/60 Hz

Colour temperature:

6500 K

Indicators:

R TALLY/G TALLY/BATT/ MAG/SAVE/I

Input signals:

Pb, Pr: 0.7 Vp-p, asynchronous, 75 Ω terminated
 Y: 1.0 Vp-p, synchronous, 75 Ω terminated

HFBK-HD1 HD SDI Output Board

The HFBK-HD1 is an HD SDI Output Board for the HFU-X310 Optical Interface Unit which is used with the HDC-X310/X310K HD multi-purpose camera.

Applicable Models

HFU-X310	HD Optical Fibre Interface Unit
HDC-X310	HD Multi-purpose Camera
HDC-X310K	HD Multi-purpose Camera
BRC-H700	HD 3CCD Colour Video Camera

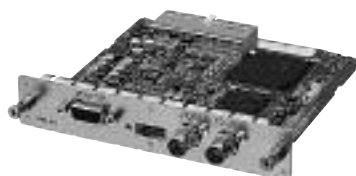


HFBK-SD1 SDI Output Board

The HFBK-SD1 is an SDI Output Board for the HFU-X310 Optical Interface Unit which is used with the HDC-X310/X310K HD multi-purpose camera.

Applicable Models

HFU-X310	HD Optical Fibre Interface Unit
HDC-X310	HD Multi-purpose Camera
HDC-X310K	HD Multi-purpose Camera
BRC-H700	HD 3CCD Colour Video Camera



HFBK-TS1 iLINK (HDV) Output Board

The HFBK-TS1 is an i.LINK (HDV) Output Board for the HFU-X310 Optical Interface Unit which is used with the HDC-X310/X310K HD multi-purpose camera.

Applicable Models

HFU-X310	HD Optical Fibre Interface Unit
HDC-X310	HD Multi-purpose Camera
HDC-X310K	HD Multi-purpose Camera
BRC-H700	HD 3CCD Colour Video Camera



HFBK-XG1 XGA Output Board

The HFBK-XG1 is an XGA Output Board for the HFU-X310 Optical Interface Unit which is used with the HDC-X310/X310K HD multi-purpose camera.

Applicable Models

HFU-X310	HD Optical Fibre Interface Unit
HDC-X310	HD Multi-purpose Camera
BRC-H700	HD 3CCD Colour Video Camera
HDC-X310K	HD Multi-purpose Camera



HKCU-1001 SD Analogue Interface Unit

The HKCU-1001 is an interface expansion option board for the HDCU-1000/HDCU-1500. It provides two analogue NTSC or PAL VBS signal outputs, WFM output, and a monitor output.

Applicable Models

HDCU-1500 Camera Control Unit

HDCU-1000 Camera Control Unit

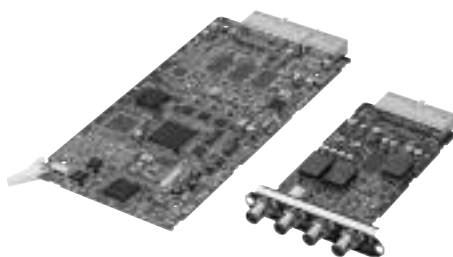
Specifications

VBS output

BNC type (2)

Analogue composite monitor output

BNC type: WF (1), PIX (1)



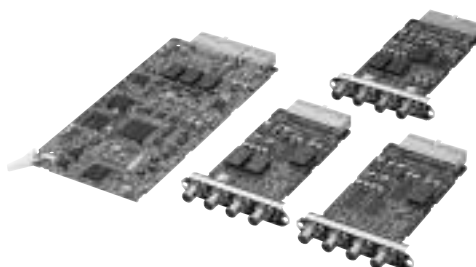
HKCU-1003 Multi Interface Unit

The HKCU-1003 is an interface expansion option board for the HDCU-1000/HDCU-1500. It consists of three types of interface board and provides: - Frame reference input and output to lock 2-3 pull-down sequence - Two analogue NTSC or PAL VBS signal outputs - Analogue NTSC or PAL VBS and analogue component R/G/B or Y/R-Y/B-Y outputs

Applicable Models

HDCU-1500 Camera Control Unit

HDCU-1000 Camera Control Unit



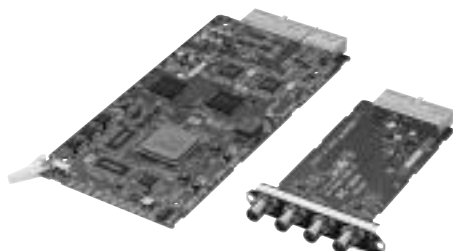
HKCU-1005 HD/SD Expansion Unit

The HKCU-1005 is an interface expansion option board for the HDCU-1000/HDCU-1500. It provides four HD-SDI or SD-SDI outputs.

Applicable Models

HDCU-1500 Camera Control Unit

HDCU-1000 Camera Control Unit



LC-DS300SFT Soft Carrying Case

Features

- Direct pack with accessories attached: Battery pack, Microphone, Viewfinder and Zoom lens.
- Easy to pack a variety of accessories such as Battery charger and other items.

Applicable Models

DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DSR-450WSPL DVCAM Camcorder
PDW-F330 XDCAM HD Camcorder
PDW-F350 XDCAM HD Camcorder

Specifications

Mass:

3.5 kg (7 lb 11 oz)

Dimensions (w/h/d):

220 × 300 × 620 mm

(without projection)

(8 3/4 × 11 7/8 × 24 1/2 inches)



LC-H300 Hard Carrying Case

Applicable Models

DSR-450WSPL DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DSR-400PK DVCAM Camcorder
PDW-F330 XDCAM HD Camcorder
PDW-F350 XDCAM HD Camcorder



LC-HB330 Hard Carrying Case

Applicable Models

DXC-D50 Series Portable Colour Camera



LCR-1 Camera Rain Cover

Features

- Transparent material used to operate camera and VTR switches with the LCR-1/1 on

Applicable Models

BVP-9500WS Super Motion Video Camera
 BVP-9500WSP Super Motion Video Camera
 DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DSR-450WSPL DVCAM Camcorder
 DXC-D50H 3-chip CCD Portable Colour Camera
 DXC-D50K 3-chip CCD Portable Colour Camera
 DXC-D50L 3-chip CCD Portable Colour Camera
 DXC-D50PH 3-chip CCD Portable Colour Camera
 DXC-D50PK 3-chip CCD Portable Colour Camera
 DXC-D50PL 3-chip CCD Portable Colour Camera
 DXC-D50WSL 3-chip CCD Portable Colour Camera
 DXC-D50WSPL 3-chip CCD Portable Colour Camera
 PDW-510P XDCAM Camcorder

PDW-530P XDCAM Camcorder
 PDW-F330 XDCAM HD Camcorder
 PDW-F350 XDCAM HD Camcorder

Specifications

Mass:
 260 g (9 oz)



LO-23 Flexible Cable Unit

Features

- Servo zooming and manual focusing for Fujinon Lens, such as VCL-916 BYA and VCL-714BXA

Specifications

Cable length:
 1 m (3.3 ft)
 Mass:
 1.2 kg (2 lb 10 oz)



LO-26 Flexible Cable Unit

Features

- Servo zooming and manual focusing for Canon Lenses, such as VCL-918BY

Specifications

Cable length:
 1 m (3.3 ft)
 Mass:
 1.1 kg (2 lb 7 oz)



MSU-900 Master Setup Unit

Features

- Central control of camera parameters for the entire camera system
- Picture and waveform monitor switching
- Precise picture adjustment
- Built-in 6.5-inch (*) type LCD display for clear viewing of adjustment parameters during operation
- Memory Stick slot for storing/recalling files
- Built-in Ethernet interface (100Base-T)

Applicable Models

HDCU-1000 Camera Control Unit
HDCU-1500 Camera Control Unit
HDC-1000 Multi-format HD Camera
HDC-1500 Multi-format HD Camera
DWW-970P Digital Betacam Camcorder
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera
BVP-E30P 3-chip CCD Portable Colour Camera
HDC-X310 HD Multi-purpose Camera
HDC-X310K HD Multi-purpose Camera

Optional Accessories

CCA-5 Cables 8-pin/8-pin Remote Control Cable

Specifications

General

Power requirements

AC 100 to 240 V, 50/60 Hz

Current consumption

0.35 A

Operating temperature

+5 to +40 °C (+41 to +104 °F)

Maximum cable length

200 m (656 feet)

Mass

Approx. 4.5 kg (9 lb 14 oz)

Dimensions (W x H x D)

482 x 67 x 222 mm (19 x 2 3/4 x 8 3/4 inches)

Inputs/outputs

Remote

CCU/CNU: 8-pin (1)

AUX: 8-pin (1)

I/O port

50-pin (1)

Ethernet

6-pin (1)

AC input

3-pin (1)



MSU-950 Master Setup Unit

Features

- Central control of camera parameters for the entire camera system
- Picture and waveform monitor switching
- Precise picture adjustment
- Built-in 6.5-inch (•) type LCD display for clear viewing of adjustment parameters during operation
- Memory Stick slot for storing/recalling files
- Built-in Ethernet interface (100Base-T)

Applicable Models

HDCU-1000 Camera Control Unit
HDCU-1500 Camera Control Unit
HDC-1000 Multi-format HD Camera
HDC-1500 Multi-format HD Camera
DVW-970P Digital Betacam Camcorder
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera
BVP-E30P 3-chip CCD Portable Colour Camera
HDC-X310 HD Multi-purpose Camera
HDC-X310K HD Multi-purpose Camera

Optional Accessories

CCA-5 Cables 8-pin/8-pin Remote Control Cable

Specifications

General

Power requirements

AC 100 to 240 V, 50/60 Hz

Current consumption

0.35 A

Operating temperature

+5 to +40 °C (+41 to +104 °F)

Maximum cable length

200 m (656 feet)

Mass

Approx. 3.7 kg (8 lb 2 oz)

Dimensions (W x H x D)

204 x 354 x 67 mm (8 1/8 x 14 x 2 3/4 inches)

Inputs/outputs

Remote

CCU/CNU: 8-pin (1)

AUX: 8-pin (1)

I/O port

50-pin (1)

Ethernet

6-pin (1)

AC input

3-pin (1)



RCP-700 Remote Control Panel (Joystick Type)

Features

- Controls Painting (black and white), Master Black and Iris Control menus for daily operation
- Basically used as a sub control panel to support MSU-700A/750/A or RCP-740/741/730/731/720/721 in combination with MSU-700A/750/A
- Up to six units of RCP-700/701 can be mounted on a 19-inch rack drawer

Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera

BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

Plug, 6-pin Male (1)

Specifications

Connectors

Remote:

CNU/CCU (8-pin)

Preview:

6-pin

General

Mass:

1.0 kg (2 lb 3 oz)

Dimensions:

68(W) x 221(H) x 127(D) mm

(2 3/4 x 8 3/4 x 5 inches)



RCP-701 Remote Control Panel (Dial Control Type)

Features

- Controls Painting (black and white), Master Black and Iris Control menus for daily operation
- Basically used as a sub control panel to support MSU-700A/750 or RCP-740/741/730/731/720/721 in combination with MSU-700A/750
- Up to six units of RCP-700/701 can be mounted on a 19-inch rack drawer

Applicable Models

BVP-E30WSP 3-chip CCD Portable Colour Camera

BVP-E30P 3-chip CCD Portable Colour Camera

Optional Accessories

CCA-5 Cables 8-pin/8-pin Remote Control Cable

Supplied Accessories

Plug, 6-pin Male

Specifications

Connectors

Remote:

CNU/CCU (8-pin)

Preview:

6-pin

General

Mass:

0.9 kg (2 lb)

Dimensions:

68(W) x 221(H) x 83(D) mm

(2 3/4 x 8 3/4 x 3 1/4 inches)



RCP-750 Remote Control Panel (Joystick type)

Features

- Small size with full paint control
- LCD panel for fully accessible menu system
- Colour LCD panel can provide full painting control items for camera
- Memory Stick operation (Up to 64 MB type can be used)
- Parallel control function with MSU-700A/750/A is available

Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
 BVP-E30WSP 3-chip CCD Portable Colour Camera
 HDC-1000 Studio Camera
 HDC-1500 Portable Camera
 HDC-X300 HD Multi-purpose Camera
 HDC-X300K HD Multi-purpose Camera
 WLL-RX55 Wireless Camera Receiver

Mass:

1.5 kg (3 lb 5 oz)

Dimensions:

102 mm x 354 mm x 126.5 mm
 (4 1/8 x 14 x 5 inches)

Inputs/Outputs

Remote:

CCU/CNU: 8-pin x 1
 AUX: 8-pin x 1

EXT I/O:

9-pin x 1

Optional Accessories

CCA-5 Cables 8-pin/8-pin Remote Control Cable

Specifications

General

Power requirements:

DC 10.5 to 35 V

Power consumption:

4 W max.

Maximum cable length:

200 m (656 feet) with CCU/HDCU connected

Operating temperature:

5°C to 40 °C (41°F to 104°F)



RCP-751 Remote Control Panel (Dial control type)

Features

- Small size with full paint control
- LCD panel for fully accessible menu system
- Colour LCD panel can provide full painting control items for camera
- Memory Stick operation (Up to 64 MB type can be used)
- Parallel control function with MSU-700A/750/A is available

Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
 BVP-E30WSP 3-chip CCD Portable Colour Camera
 HDC-1000 Studio Camera
 HDC-1500 Portable Camera
 HDC-X300 HD Multi-purpose Camera
 HDC-X300K HD Multi-purpose Camera
 WLL-RX55 Wireless Camera Receiver

Mass:

1.3 kg (2 lb 14 oz)

Dimensions:

102 mm x 354 mm x 86.5 mm
 (4 1/8 x 14 x 3 1/2 inches)

Inputs/Outputs

Remote:

CCU/CNU: 8-pin x 1
 AUX: 8-pin x 1

EXT I/O:

9-pin x 1

Optional Accessories

CCA-5 Cables 8-pin/8-pin Remote Control Cable

Specifications

General

Power requirements:

DC 10.5 to 35 V

Power consumption:

4 W max.

Maximum cable length:

200 m (656 feet) with CCU/HDCU connected

Operating temperature:

5°C to 40 °C (41°F to 104°F)



RCP-D50 Remote Control Panel (Joystick Type)

Features

- Covers the complete range of camera control functions
- Provides Joystick operation •3.5-inch (*1) LCD screen with touch panel function •Allows incoming camera image to be monitored on LCD panel (*2) •Memory Stick system — various scene files can be stored on/recalled from the Memory Stick media and loaded to a different

RCP-D50/D51 or DXC-D50

(*1) Viewable area measured diagonally. (*2) When used with a CCU-TX7/TX7P camera control unit, please ask Sony representative.

Applicable Models

DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera

Supplied Accessories

CCA-7-5 Connecting Cable (5 m) (1)
Operation Manual (1)
Screws and Washers (2)
Number Plate (1)

Optional Accessories

CCA-7 Cables 10-pin/10-pin Cable

Specifications

Power requirements:
10 to 17 V
(supplied from camera or CCU)
Power consumption:
4.0 W
Operating temperature:
+5°C to 40°C (41°F to 104°F)
Storage temperature:
-20°C to 55°C (-4°F to 131°F)
Dimensions:
102 (W) x 74 (D) x 354 (D) mm
(4 1/8 x 3 x 14 inches)
Mass:
Approx. 1.5 kg (3 lb 5 oz)



RCP-D51 Remote Control Panel (Dial Control Type)

Features

- Covers the complete range of camera control functions
- Provides Encoder operation •3.5-inch (*1) LCD screen with touch panel function •Allows incoming camera image to be monitored on LCD panel (*2) •Memory Stick system — various scene files can be stored on/recalled from the Memory Stick media and loaded to a different

RCP-D50/D51 or DXC-D50

(*1) Viewable area measured diagonally. (*2) When used with a CCU-TX7/TX7P camera control unit, please ask Sony representative.

Applicable Models

DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera

Supplied Accessories

CCA-7-5 Connecting Cable (5 m) (1)
Operation Manual (1)
Screws and Washers (2)
Number Plate (1)

Optional Accessories

CCA-7 Cables 10-pin/10-pin Cable

Specifications

Power requirements:
10 to 17 V
(supplied from camera or CCU)
Power consumption:
4.0 W
Operating temperature:
+5°C to 40°C (41°F to 104°F)
Storage temperature:
-20°C to 55°C (-4°F to 131°F)
Dimensions:
102 (W) x 74 (D) x 354 (D) mm
(4 1/8 x 3 x 14 inches)
Mass:
Approx. 1.3 kg (2 lb 14 oz)



RM-BR300 Remote Control Unit

Features

- Easy-to-use and ergonomic joystick design
- Feature-rich control panel

Applicable Models

BRC-300 3-CCD Colour Video Camera
BRU-300 Optical Multiplex Unit

Supplied Accessories

AC adaptor (1)
AC power cable (1)
RS-232C cable (1)
Terminal connector (2)
Operating instructions (1)



RM-C950 Remote Control Unit

Features

- Full remote control of the DXC-9000/950/ H10/390/990 camera functions and lens zoom/ focus/iris functions via RS-232C
- Facilitated operation with knob control of gain, detail, master pedestal, red and blue gain functions
- Power is supplied through the DXC-9000/ 950/990 connected to the CMA-D2 Camera Adaptor or CCU-M5 Remote Control Unit
- Power is supplied through the DXC-H10 connected to the CMA-H10 Camera Adaptor

Applicable Models

DXC-390 3-CCD Colour Video Camera
DXC-390P 3-CCD Colour Video Camera
DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera
DXC-C33 3-CCD Colour Video Camera
DXC-C33P 3-CCD Colour Video Camera

Supplied Accessories

Connection cable (3 m) (1)
Operation manual (1)

Specifications

Power requirements:
DC 12 V (supplied from DXC-9000/950 connected to CMA-D2 or CCU-M5)
Operating temperature:
-5 to 45°C (23 to 113°F)
Connectors:
CAMERA (8-pin)
Mass:
Approx. 400 g (14 oz)
Dimensions:
212 (W) × 41 (H) × 132 (D) mm
(8 3/8 × 1 5/8 × 5 1/4 inches)
(excluding projecting parts and controls)



RMM-301 Rack Mounting Bracket

Rack Mounting Bracket for CCU-590P and CCU-TX50

Specifications

Dimensions:

482(W) × 132(H) × 330(D)mm
(19 1/8 × 5 1/4 × 13 inches)

Mass:

4.7 kg (10 lb 6 oz)



VCL-0716BXA 1/2 Type Bayonet Mount Lens



Applicable Models

DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera

Supplied Accessories

Lens cap (front) (1)
Operation manual (1)
Lens cap (rear) (1)

Specifications

Type
1/2 type
Focal length
7.3 to 117 mm
Zoom ratio
16x
Maximum relative aperture
F1.9 (7.3 to 98 mm) to F2.3 (117 mm)
Flange focal length (in air)
38 mm (adjustable range: +/-0.3 mm)

Minimum object distance
1 m (0.04 m in macro operation)
Angle of view
Horizontal: 47°20' to 3°08'
Vertical: 36°24' to 2°21'
Diagonal: 57°26' to 3°55'
Iris control
Manual, Auto, Remote control from camera or control box
Zoom control
Manual, Remote control from control box
Focus control
Manual, Remote control from control box
Power requirements
DC 12 V
Current consumption
70 mA (Quiescent), 350 mA (Maximum)
Mount
Bayonet mount

Mass
Approx. 870 g (1 lb 15 oz)
Dimensions (W x H x D)
90.5 x 75 x 144.2 mm (3 5/8 x 3 x 5 3/4 inches), without lens hood

* Zoom/Focus/Iris functions can be remotely controlled from RM-C950/8.

VCL-616WEA 1/3 Type C-mount Lens



Supplied Accessories

Lens hood (1)
Lens cap (front) (1)
Lens cap (rear) (1)
Operation manual (1)

Specifications

Application
1/3 type format 3CCD colour camera
Focal length
5.5 to 88 mm
Zoom ratio
16x
Maximum relative aperture
F1.4 (5.5 mm) to F1.8 (88 mm)
Iris range
F1.4 to F16, closed

Flange focal length (in air)
17.526 +/-0.05 mm (adjustable range: +/-0.20 mm)
Minimum object distance
1.0 m
Angle of view
Horizontal: 47°09' to 3°07'
Vertical: 36°15' to 2°21'
Iris control
Manual, Auto, Remote control from camera or control box
Zoom control
Manual, Remote control from control box
Focus control
Manual, Remote control from control box
Power requirements
DC 12 V
Maximum current consumption
400 mA

Mount
C mount
Mass
Approx. 900 g (1 lb 16 oz), without lens hood
Dimensions (W x H x D)
100 x 108 x 198.8 mm (4 x 4 1/4 x 7 7/8 inches)

VCS-700 Video Selector

Features

•Routes video output of multiple cameras for picture and waveform monitoring •Accepts up to six picture and waveform inputs •Video output selectable from the MSU-700A/750/A or external control equipment through the 37-pin I/O port •Two picture and waveform outputs available for different system applications



Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

AC power cord (1)
Plug holder for the AC power cord (1)
4-pin connector (1)
Operation manual (1)
Maintenance manual (1)

Specifications

General

Power requirements:
220 to 240 V AC, 50/60 Hz
Power consumption:
0.28 VA
Operating temperature:
5 to +45 °C (73 to +113 °F)
Mass:
5.2 kg (11 lb 7 oz)

Dimensions:

424(W) x 44(H) x 400(D)mm
(16 3/4 x 1 3/4 x 15 3/4 inches)

Input connectors

PIX 1 to PIX 6 input:
BNC type (6)
WF 1 to WF 6 input:
BNC type (6)
1.0 Vp-p(VBS)/0.7 Vp-p(V), 75 Ω
PIX A input:
BNC type (1) 1.0 Vp-p(VBS), 75 Ω
WF A input:

BNC type (1) 1.0 Vp-p(VBS), 75 Ω

CHARACTER input:

BNC type (1, with loop-through output)
0.7 Vp-p(V), 75 Ω

AC in:

3-pin

Output connectors

PIX A and PIX B output:
BNC type (1 each), 1.0 Vp-p(VBS), 75 Ω
WF A and WF B output:
1.0 Vp-p(VBS)/0.7 Vp-p(V), 75 Ω

SYNC output:

BNC type (1)
0.3 Vp-p(VBS), 75 Ω, negative polarity

WF mode:

round 4-pin connector (1)

Remote connectors

REMOTE:
8-pin multiconnectors (1)

I/O PORT:

D-sub 37-pin(1)

VCT-U14 Tripod Adaptor



Applicable Models

DSR-250P/1 DVCAM Camcorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DSR-450WSPL DVCAM Camcorder
DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera

Specifications

Dimensions:
282 (W) × 27 (H) × 80 (D) mm
(11 1/8 × 1 1/8 × 3 1/4 inches)
Mass:
Approx. 900 g (2 lb)

VFH-550 5-inch Type Viewfinder Sports Hood

5-inch type viewfinder sports hood for BVF-55 series

Applicable Models
BVF-55CE/1



VFH-770 7-inch Type Viewfinder Sports Hood

7-inch type viewfinder sports hood for BVF-7700/77 series

Applicable Models
BVF-77CE/1
HDVF-C730W LCD Colour Viewfinder



WLL-CA50 Wireless Camera Transmitter (CER)

Features

- Wireless camera transmitter connected to either a Digital Betacam, MPEG IMX, or XDCAM camcorder, and used with the WLL-RX55 wireless camera receiver
- MPEG-2 video compression and MPEG-1 Layer I/II 48-kHz audio
- COFDM for stable transmission
- Time interleave
- Secure encryption key
- 2.4 GHz band transmission frequency allows a license-free operation
- Cable-free camcorder connection
- Flexible channel selector (up to 6 simultaneous channels)
- User-friendly menu
- Low power consumption



Applicable Models

DVW-970P Digital Betacam Camcorder
MSW-970P MPEG IMX Camcorder
PDW-510P XDCAM Camcorder
(DVCAM Recording)
PDW-530P XDCAM Camcorder
(MPEG IMX/DVCAM Recording)

Supplied Accessories

Transmission antenna (1)

Optional Accessories

BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-GL65 Rechargeable Lithium-ion Battery Pack
AC-550CE AC Adaptor
WLL-RX55

Specifications

General

Power requirement:
12 V DC
Power consumption:
9W
Operating temperature:
0 °C to +40 °C (+32 °F to +104 °F)
Dimension (w x h x d):
97 x 209 x 152 (mm),
3 7/8 x 8 1/4 x 6 (inches)
Mass (excluding antenna):
1.2 kg (2 lb 10 oz)

RF block

TX centre frequency range:
2406 to 2478 MHz
Modulation:
16 QAM-COFDM, QPSK-COFDM
Occupied bandwidth:
8 MHz
Channel spacing:
12 MHz
RF power output:
4 mW (EIRP = 10 mW)
Antenna gain:
4.0 dBi

Input

Input signals:
Digital component parallel
40-pin (Sony camcorder)
SDI (embedded audio)
BNC (x1) (spare)
Ext. DC IN:
11.3 to 17 V DC
XLR 4-pin male (x1)

Eco-info

Lead-free solder is used for soldering certain parts.
Halogenated flame retardants are not used in the printed wiring boards.

WLL-CA55 Wireless Camera Transmitter (CER)

Features

- Wireless camera transmitter connected to a BVP-E30 camera, and used with the WLL-RX55 receiver
- MPEG-2 broadcast quality video and MPEG-1 Layer I/II 48-kHz audio transmission
- Stable transmission using COFDM technology
- Time interleave
- 2.4 GHz band transmission frequency allows a license-free operation
- Secure encryption key
- Cable-free camera connection
- Full camera remote control capability
- Full camera genlock
- Flexible channel selector (up to 6 simultaneous channels)
- User-friendly menu
- Transmission status display in viewfinder
- Low power consumption



Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera

Supplied Accessories

Transmission antenna (1)
Operation manual (1)

Optional Accessories

BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
AC-550CE AC Adaptor
WRR-855B UHF Synthesised Diversity Tuner (62CE7)
WRR-855A UHF Synthesised Diversity Tuner (64U)

Specifications

General

Power requirements:
DC 12 V
Power consumption:
15 W
Operating temperature:
-20 °C to +45 °C (-4 °F to +113 °F)
Dimensions (W x H x D):
132 x 214 x 176 mm (5 1/4 x 8 1/2 x 7 inches)
Mass (excluding antenna):
2 kg (4 lb 7 oz)

RF block

Transmission frequency range:
2402 to 2470 MHz (USA and Canada)
2402 to 2482 MHz (Other countries)

Transmission centre

frequency range:
2406 to 2466 MHz
(USA and Canada)
2406 to 2478 MHz (Other countries)

Transmission mode:

Standard/Robust/High-picture/Standard-LD
(low delay)/Robust-LD (low delay)

Minimum system delay (Time interleave mode: off):

2.3 frames (*)

Modulation:

16 QAM-COFDM, QPSK-COFDM

Occupied bandwidth:

8 MHz

Channel spacing:

12 MHz

RF power output:

4 mW (EIRP=10 mW)

Antenna gain:

4.0 dBi

Antenna directivity:

Omni-directional

Input/output

Camera interface:

Digital component parallel 68-pin (for Sony digital camera)
Analogue component parallel 68-pin (for Sony analogue camera)

DC input:

XLR-4-pin (for the optional AC-550/550CE), DC 10.5 to 17 V

DC output:

4-pin (for wireless microphone receiver), DC 10.5 to 17 V (Max. 200 mA)

RF output:

N-type special connector, 50 Ω

Video input:

BNC (SDI or analogue composite), 1.0 Vp-p, 75 Ω

Audio input (CH-1/CH-2):

XLR-3-pin x 2

Intercom:

XLR-5-pin

Earphone:

Mini jack

Remote:

8-pin

Slot for wireless microphone receiver:

D-sub 15-pin

Eco info

Lead-free solder is used for soldering certain parts.
Halogenated flame retardants are not used in the printed wiring boards.

* The system delay is measured by WLL-CA55 and WLL-RX55 combination.

WLL-RX55 Wireless Camera Receiver

Features

- Wireless camera receiver, designed to be used with the WLL-CA50/CA55
- Diversity reception
- MPEG-2 video compression and MPEG-1 Layer I/II 48-kHz audio
- COFDM for stable transmission
- Time interleave
- 2.4 GHz band transmission frequency allows a license-free operation
- Secure encryption key
- Flexible channel selector (up to 6 simultaneous channels)
- Wireless camera control capability
- User-friendly menu
- Versatile antenna unit



Supplied Accessories

- Reception antenna (2)
- Down converter (2)
- Mounting bracket (2)
- Mounting screw: M3 (4)
- Mounting screw: M4 (8)
- Coaxial cable with N-type connectors (10 m) (2)
- 4-pin connector (1)
- Fasten belt (1)
- Camera number plate (1)
- Operation manual (1)

Optional Accessories

- RM-B750 Remote Control Unit
- RM-B150 Remote Control Unit
- RCP-750 Remote Control Panel (Joystick type)
- RCP-751 Remote Control Panel (Dial control type)
- WRT-8B UHF Synthesised Transmitter (6668U)
- WRT-822A UHF Synthesised Wireless Transmitter (64U)
- WRT-822B UHF Synthesised Wireless Transmitter (62CE7)

Specifications

General

- Power requirements:
 - AC 100 to 240 V, 50/60 Hz or DC 12 V
- Power consumption:
 - 66 W
- Operating temperature:
 - 5 to 40 °C (41 to 104 °F)
- Storage temperature:
 - 20 to +60 °C (-4 to +140 °F)
- Dimensions (W x H x D):
 - 200 x 127 x 365 mm (7 7/8 x 5 x 14 3/8 inches)
- Mass:
 - 5 kg (11 lb)
- Reception system**
 - Receiving centre frequency range:
 - 2406 to 2478 MHz
 - Occupied bandwidth:
 - 8 MHz
 - Channel spacing:
 - 12 MHz
 - Antenna gain:
 - 9.0 dBi
 - Antenna directivity:
 - 60°
 - Modulation:
 - 16QAM-COFDM, QPSK-COFDM

- IF centre frequency:
 - 326 to 398 MHz
- IF input connector:
 - N-type special connector x 2, 50 Ω
- IF output connector:
 - N type special connector x 2, 50 Ω, loop through
- Input/output**
 - Bitstream input:
 - Data format
 - DVB-ASI
 - Connector
 - BNC x 2, 75 Ω
 - Bitstream output:
 - Data format
 - DVB-ASI
 - Connector
 - BNC x 2, 75 Ω
 - Sync signal input:
 - Reference input
 - BNC x 2, VBS/BS: 1.0 Vp-p, 75 Ω, loop through
 - Digital signal output:
 - SDI/ASI output
 - BNC x 3, transmission cable length: max. 200 m
 - SDI: 4:2:2 component serial digital (270 Mb/s), 0.8 Vp-p, 75 Ω
 - ASI: DVB-ASI, EN50083-9 (DVB-PI-232 Revised TM Rev.2)
 - Transmission mode: Data-packet mode (188 bytes)
 - Analogue signal output:
 - Video 1
 - BNC, 1.0 Vp-p, 75 Ω
 - Video 2
 - BNC, 1.0 Vp-p, 75 Ω
 - Video 3
 - BNC, 1.0 Vp-p, 75 Ω
 - PIX
 - BNC, 1.0 Vp-p, 75 Ω
 - WF
 - BNC, Encode output: 1.0 Vp-p, 75 Ω
 - WF mode
 - 4-pin
 - Audio output
 - XLR-3-pin x 2, 0 dBu/-20 dBu balanced
- Other input/output**
 - DC input:
 - XLR-4-pin (for the optional AC-550/550CE), DC 10.5 to 17 V
 - DC output:
 - 4-pin (for wireless microphone transmitter) (Max. 200 mA)

- Remote:
 - 8-pin
- Intercom/Tally/Program:
 - D-sub 25-pin, 4W/RTS, Tally: DC 24 V, TTL level, or contact selectable
- Mic remote:
 - D-sub 15-pin
- Intercom (front):
 - XLR-5-pin
- Camera control:
 - XLR-3-pin
- Eco info**
 - Lead-free solder is used for soldering certain parts.
 - Halogenated flame retardants are not used in the printed wiring boards.

SONY

HVR-Z1E 78
HVR-A1E 80
HVR-M15E 82
HVR-M25E 83

HVR-Z1E HDV Camcorder

Features

3CCD Camera System with "1080i HD CCD"

- 14bit HD DXP •Carl Zeiss® Vario-Sonnar® T* Lens with 12x Optical Zoom •HD Codec Engine™
- HDV1080i/DVCAM/DV (SP) recording and playback switchable system •50i/60i (PAL/NTSC) recording and playback switchable system
- Precision 16:9 SD recording and playback
- Down Conversion function •Built-in wide-range stereo microphone and 2 ch. XLR Audio Inputs
- Versatile Time Code settings •16:9 colour viewfinder •16:9 3.5" hybrid colour LCD monitor •Simultaneous Operation of LCD monitor and viewfinder •On handle zoom lever and rec. start/stop button •Variety of zoom operation •AF (Auto Focus) assist
- Manual Iris •Manual Gain •Manual Shutter Speed •Assign Buttons (custom configurable) •Expand focus •Marker
- Colour bars •External REC control •Quick REC •Audio Settings (recording levels, mic. Select, monitoring, audio lock, output select, limiter, noise reduction) •Shot Transition™ •Picture Profile™
- Cinematone Gamma™ and Cineframe™ •Colour correction functions •Status Check button •Multi-language operation •Battery status indicator •Customised menu settings •Long recording time



Supplied Accessories

- AC-VQ850 (AC Adaptor/Charger)
- Power cord DK-415 (Connecting cord)
- NP-F570 (InfoLITHIUM Rechargeable battery pack)
- Lens Hood
- Large Eye Cup
- RMT-841 (Wireless Remote Controller)
- A/V Connecting cable
- Shoe Adaptor
- 2x Size AA (R6) batteries
- Cleaning Cassette
- Shoulder strap

Optional Accessories

- NP-F970 InfoLITHIUM rechargeable battery pack
- NP-F770 InfoLITHIUM rechargeable battery pack
- NP-F570 InfoLITHIUM rechargeable battery pack
- 2NP-F970/B InfoLITHIUM rechargeable battery pack
- VCT-FXA Shoulder Brace
- VCL-HG0872 0.8x Wide Conversion Lens
- VF-72CPK Filter Kit
- LCH-FXA Hard Carrying Case
- LCS-VCB Soft Carrying Case
- LCR-FXA Rain Jacket

Specifications

Camera section

Lens:

Carl Zeiss Vario-Sonnar T* zoom lens,
12x (optical), f = 4. 5 to 54 mm (3/16 to 2
1/4 inches), f = 32.5 to 390 mm (1 5/16 to
15 3/8 inches)* at 16:9 mode, f = 40 to
480 mm (1 5/8 to 19 inches)* at 4:3 mode,
F = 1.6 to 2.8, filter diameter: 72 mm
(2 7/8 inches)

Built-in filter:

1/6 ND, 1/32 ND

Focus:

Auto, manual (focus ring/infinity position),
one push auto

Imaging device:

3-chip 1/3-inch type CCDs

Picture elements:

Approx. 1,070,000 pixels (effective),
approx. 1,120,000 pixels (total)

White balance:

Auto, one-push auto, indoor (3200 K),
outdoor (5800 K \pm 7 steps)

Shutter speed:

50i/PAL mode 1/3, 1/6, 1/12, 1/25, 1/50,
1/60, 1/100, 1/120, 1/150, 1/215, 1/300,
1/425, 1/600, 1/1000, 1/1250, 1/1750,
1/2500, 1/3500, 1/6000, 1/10000 s
60i/NTSC mode 1/4, 1/8, 1/15, 1/30, 1/60,
1/90, 1/100, 1/125, 1/180, 1/250, 1/350,
1/500, 1/725, 1/1000, 1/1500, 1/2000,
1/3000, 1/4000, 1/6000, 1/10000 s

Exposure:

Auto, manual

Gain:

0, 3, 6, 9, 12, 15, 18 dB (adjustable for H,
M and L gain positions)

Minimum illumination:

3 lx with F1.6 at 18 dB

* These values are calculated to be equivalent to
35mm film

VTR section

Recording format:

1080/50i, 1080/60i, 576/50i (PAL), 480/60i
(NTSC)

Playout/Down-conversion format:

1080/50i, 1080/60i, 576/50i (PAL), 480/60i
(NTSC) 576/50p, 480/60p

Tape speed:

HDV/DV SP Max. 18.812 mm/s with
PHDVM-63DM cassette
DVCAM Max. 28.218 mm/s with PHDVM-
63DM cassette

Playback/Recording time:

HDV/DV SPMax. 63 min with PHDVM-
63DM cassette
DVCAM Max. 41 min with PHDVM-63DM
cassette

Fast forward/Rewind time:

Approx. 2 min 40 s with PHDVM-63DM
cassette

Built-in input/output devices

LCD viewfinder:

0.44-inch type, approx. 252,000 pixels
(1120 x 225), hybrid type LCD monitor
3.5-inch type, approx. 250,000 pixels
(1120 x 224), hybrid type

Microphone:

Stereo type, noise reduction on/off

General

Mass Approx.:

2.1 kg (4 lb 10 oz) (camcorder only)

Power requirements

DC 7.2 V (battery pack)

Power consumption:

HDV Approx. 8.0 W (recording mode
with LCD viewfinder on)
DVCAM/DV Approx. 7.6 W (recording
mode with LCD viewfinder on)

Operating temperature:

0 to 40 °C (32 to 104 °K)

Storage temperature:

-20 to +60 °C (-4 to 140 °K)

Supplied accessories:

AC-VQ850 AC adaptor/charger, power
cord, connecting cord, lens hood, large
eye-cup, RMT-841 wireless Remote
Commander, A/V connecting cable,
component video cable, shoe adaptor,
NP-F570 InfoLITHIUM rechargeable
battery pack, size AA (R6) batteries (2),
cleaning cassette, shoulder strap,
operating instructions

HVR-A1E HDV Camcorder

Features

- Adopts HDV 1080i specification of the HDV format that features 1080 effective scanning lines and 1440 horizontal pixels
- Compatible with existing DV tape and new high-grade mini cassette tape; DigitalMaster PHDVM-63DM
- Long recording time of 63 minutes with the DigitalMaster mini cassette tape
- 1/3-inch type, 2.97-megapixel CMOS sensor
- Enhanced Imaging Processor (EIP)
- Optical 10x Carl Zeiss Vario-Sonnar T* zoom lens
- Electronic Super SteadyShot system
- Full scan mode to capture images with the resolution of approximately two million pixels
- Switchable recording and playback - HDV 1080i/DVCAM/DV (SP)
- Down-conversion playback from 1080i down to 576i and 576P
- Aspect ratio conversion from 16:9 to 4:3
- HD Codec Engine to compress baseband HD signal data at approx. 25 Mb/s with MPEG-2 compression
- Still picture recording to Memory Stick Duo media
- 16:9 widescreen acquisition in DVCAM and DV formats
- i.LINK interface
- 2-channel XLR audio input
- 2-channel independent audio record level control with audio level meter
- Compact and lightweight design
- 16:9, colour/black-and-white switchable LCD viewfinder
- 2.7-inch¹ type, 16:9 widescreen, hybrid colour LCD monitor
- Variety of zoom operations with a zoom lever, a zoom/focus ring and zoom buttons
- Manual and automatic exposure control using the exposure lever
- Tele macro function
- New backlight compensation function
- Marker display
- User assignable function button
- Time code preset
- Histogram indicator for easy evaluation of the brightness of captured images
- Shot Transition function to offer automatic transition of various shooting parameters between shots
- Cinema-like image shooting
- Long operating time; 300 minutes in HDV mode and 340 minutes in DVCAM/DV mode with the NP-QM91D battery
- Expanded focus function for easy confirmation of focus setting during manual focusing
- Peaking function to enhance the outline of the image in the viewfinder for easy manual focusing
- Zebra function for easy manual exposure control
- Quick REC function to shorten the time until the recording starts from stop mode
- Status check function for easy confirmation of various parameters of camera setting menus
- Personal menu function to allows operators to customise the setting menu to display frequently used menu items
- Battery info function to display the battery charge level and remaining recording time
- Super night shot function to capture images in black and white using a built-in infrared light
- Skin tone detail function
- Black stretch function



Supplied Accessories

- AC-L15 AC Adaptor
- Power cord
- NP-FM50 InfoLITHIUM Rechargeable battery pack
- Lens hood with lens cover
- RMT-831 Wireless Remote Commander unit
- A/V connecting cable with S video
- Component video cable
- USB cable
- Memory Stick Duo (16 MB)
- Memory Stick Duo adaptor
- ECM-NV1 Monaural electret condenser microphone
- XLR Audio adaptor
- Shoulder strap
- Operating instructions

Optional Accessories

- NP-QM71D InfoLITHIUM Rechargeable Battery Pack
- NP-QM91D Rechargeable Battery Pack
- VCL-HG2037Y 2.0x Tele Conversion Lens
- VCL-HG0737Y 0.7x Wide Conversion Lens
- LCH-HCE Hard Carrying Case
- VMC-30VC Cable 3m Component Video Cable
- VMC-30FS Cable 3m Multi AV Cable (with S Video)
- PHDVM-63DM tape DigitalMaster Mini Cassette Tape
- RM-1BP LANC Remote Controller
- VCT-PG11RMB Tripod with the RM-1BP
- LANC Remote Controller
- UWP-C1 UHF Synthesised Wireless Microphone Package

Specifications

Camera section

Lens

Carl Zeiss Vario-Sonnar T* zoom lens,
10x (optical), $f = 5.1$ to 51 mm, $f = 40$ to
400 mm in 16:9 mode and 49.3 to 493 mm
in 4:3 mode (full scan mode on)*
 $f = 41$ to 480 mm in 16:9 mode and 50 to
590 mm in 4:3 mode (full scan mode off)*
 $f = 40$ to 400 mm in 16:9 mode and 37 to
370 mm in 4:3 mode (still picture mode)*
 $f = 1.8$ to 2.1, filter diameter: 37 mm

Focus

Auto, manual, spot focus
(touch panel control)

Imaging device

1-chip, 1/3-inch type primary colour
CMOS sensor

Picture elements

Approx. 2,969,000 pixels (total)

Shutter speed

1/3, 1/6, 1/12, 1/25, 1/50, 1/60, 1/100,
1/120, 1/150, 1/215, 1/300, 1/425, 1/600,
1/1000, 1/1250, 1/1750, 1/2500, 1/3500,
1/6000, 1/10000 s

Minimum illumination

7 lx with F1.8

VTR section

Recording format

1080/50i, 576/50i

Play out/Down conversion format

1080/50i, 576/50i, 576/50P

Tape speed

HDV/DV SP

Max. 18.812 mm/s with
PHDVM-63DM cassette

DVCAM

Max. 28.218 mm/s with
PHDVM-63DM cassette

Playback/Recording time

HDV/DV SP

Max. 63 min with
PHDVM-63DM cassette

DVCAM

Max. 41 min with
PHDVM-63DM cassette

Fast forward/Rewind time

Approx. 2 min 40 s with PHDVM-63DM
cassette (using a fully charged battery)
Approx. 1 min 45 s with PHDVM-63DM
cassette (using an AC adaptor)

Input/Output connectors

Audio/Video input/output

A/V OUT jack, 10-pin connector
Composite video: 1 Vp-p,
75 Ω unbalanced, sync negative
Y: 1 Vp-p, 75 Ω unbalanced, sync negative
C: 0.3 Vp-p, 75 Ω unbalanced
Audio: 327 mV, input impedance more than
47 k Ω , output impedance less than 2.2 k Ω

Component video output

COMPONENT OUT jack
Y: 1 Vp-p (0.3 V, sync negative),
75 Ω unbalanced
Pr/Pb (Cr/Cb): 525 mVp-p (75% colour
bar)

HDV/DV input/output

i.LINK interface
(IEEE 1394, 4-pin connector)

XLR audio input

XLR 3-pin female x 2, 327 mV, -60 dBu:
3 k Ω , +40 dBu: 10.8 k Ω ,
power supply: approx. 48 V

Headphone

Stereo minijack (\varnothing 3.5 mm) x 1

MIC

Minijack x 1, 0.388 mV, low impedance
with DC 2.5 to 3.0 V, output impedance
6.8 k Ω (\varnothing 3.5 mm), stereo type

LANC

Stereo mini-minijack (\varnothing 2.5 mm) x 1

USB

Mini-B x 1

Built-in input/output devices

LCD viewfinder

0.44-inch type, approx. 252,000
(1120 x 225) pixels, hybrid type,
16:9 aspect ratio

LCD monitor

2.7-inch type, approx. 123,200
(560 x 220) pixels, hybrid type,
16:9 aspect ratio

Microphone

Stereo type, noise reduction on/off

Speaker

\varnothing 16 mm

General

Mass

Approx. 670 g (1 lb 7 oz) (camcorder only)

Power requirements

DC 7.2 V (battery pack),
DC 8.4 V (AC adaptor)

Power consumption

HDV

Approx. 5.6 W (recording mode with
LCD viewfinder on)

DVCAM/DV

Approx. 5.1 W (recording mode with
LCD viewfinder on)

Operating temperature

0 to 40°C (32 to 104°F)

Storage temperature

20 to +60 °C (-4 to 140 °F)

* These values are calculated to be
equivalent to 35 mm film.

HVR-M15E HDV VTR

Features

- Adopts HDV 1080i specification of the HDV format that features 1080 effective scanning lines and 1440 horizontal pixels
- Compatible with existing DV tape and new DigitalMaster high-grade videocassette tape
- Switchable recording and playback - HDV 1080i/DVCAM/DV SP and 60i/50i
- Dual-size cassette mechanism to accept both mini and standard cassettes
- Long recording time - a maximum of 276 minutes with the PHDV-276DM DigitalMaster standard cassette tape
- Down-conversion playback capabilities from 1080i down to 480i, 576i, 480P, and 576P
- i.LINK interface
- Time code copy from external devices
- Auto repeat
- Colour bar and 1-kHz audio tone signal output
- External control by the supplied wireless Remote Commander unit
- Built-in tape cleaner for reliable operation
- Compact, unique design - can be placed vertically and horizontally

Supplied Accessories

Remote Commander (1)
AC Adaptor (1)
Size AA Battery (2)
Power Cord (1)
Stand (1)
Cleaning Cassette (1)
Operating Instructions (1)

Optional Accessories

VMC-IL44 i.LINK Cable (4-pin to 4-pin)
VMC-IL46 i.LINK Cable (4-pin to 6-pin)
PHDV/PHDVM DigitalMaster™ Standard and Mini Cassette Tapes



Specifications

Recording/Playback performance

Recording format
1080/60i, 1080/50i,
480/60i (NTSC), 576/50i (PAL)
Playout/down conversion format
1080/60i, 1080/50i,
480/60i (NTSC), 576/50i (PAL),
480/60P, 576/50P
Tape speed
HDV/DV SP
Max. 18.812 mm/s
DVCAM
Max. 28.218 mm/s
Playback/recording time
HDV/DV SP
Max. 276 min with
PHDV-276DM cassette
Max. 63 min with
PHDVM-63DM cassette
DVCAM
Max. 184 min with
PHDV-276DM cassette
Max. 41 min with
PHDVM-63DM cassette
Fast forward/rewind time
Approx. 2 min with PHDV-276DM cassette

Input/Output connectors/devices

Video input/output
RCA pin x 2
Video signal: 1 Vp-p,
75 Ω unbalanced, sync negative
S-video input/output
Mini-DIN 4-pin x 2
Y: 1 Vp-p, 75 Ω unbalanced,
sync negative
C: 0.286 Vp-p (NTSC), 0.3 Vp-p (PAL),
75 Ω unbalanced,
Component video output
RCA pin x 3
Y: 1 Vp-p (0.3 V, sync negative)
Pr/Pb (Cr/Cb): 700 mVp-p
(100% colour bar), input impedance 75 Ω
i.LINK
4-pin
LANC
Stereo mini-minijack (\varnothing 2.5 mm)
Control S
Stereo minijack (\varnothing 3.5 mm)
Audio input
RCA pin x 2
Input level: -10 dBu, input impedance: min.
10 k Ω unbalanced
Max input level: +16 dBu (approx. 5 Vrms)
in 60i mode, +14 dBu (approx. 4 Vrms)
in 50i mode
Audio output
RCA pin x 2
Output level: -10 dBu (full bit -20 dB),
impedance 47 k Ω , unbalanced in 60i
mode, -10 dBu (full bit -18 dB), impedance
47 k Ω , unbalanced in 50i mode
Impedance: max. 1 k Ω unbalanced

General

Dimensions (W x H x D)
184 x 69 x 261 mm
(7 1/8 x 2 3/4 x 10 3/8 inches)
Mass
Approx. 2.3 kg (5 lb 1 oz)
Power requirements
DC 8.4 V
Power consumption
12 W (playback mode with
LCD monitor on)
Operating temperature
5 to 40°C (41 to 104°F)
Storage temperature
-20 to +60°C (-4 to 140°F)

HVR-M25E HDV VTR

Features

- Adopts HDV 1080i specification of the HDV format that features 1080 effective scanning lines and 1440 horizontal pixels
- Compatible with existing DV tape and new DigitalMaster high-grade videocassette tape
- Switchable recording and playback - HDV 1080i/DVCAM/DV SP and 60i/50i
- Dual-size cassette mechanism to accept both mini and standard cassettes
- Long recording time - a maximum of 276 minutes with the PHDV-276DM DigitalMaster standard cassette tape
- Down-conversion playback capabilities from 1080i down to 480i, 576i, 480P, 576P, and 720P
- Edge Crop Adjust function
- i.LINK interface
- Time code copy from external devices
- Auto Repeat and Custom Repeat functions
- Colour bar and 1-kHz audio tone signal output
- External control by the supplied wireless Remote Commander unit
- Built-in tape cleaner for reliable operation
- Built-in, 2.7-inch* type, Clear Photo LCD Plus monitor
- HDMI (High Definition Multimedia Interface) output
- DUPLICATE PLUS function for an easy duplication of video and audio along with the time code
- MARKER BURN function to allow the 4:3 marker to be superimposed onto video output
- Time counter
- Time code preset
- Status Check function for easy status or settings check on the LCD monitor
- Assign Buttons function to assign frequently used functions to the buttons on the front panel
- All Scan Mode to display all effective scanning lines in the screen



Supplied Accessories

Supplied Accessories
Remote Commander (1)
Size AA Battery (2)
Power Cord (1)
Cleaning Cassette (1)
Operating Instructions (1)

Optional Accessories

VMC-IL44 i.LINK Cable (4-pin to 4-pin)
VMC-IL46 i.LINK Cable (4-pin to 6-pin)
DLC Cables HDMI Cables
PHDV/PHDVM DigitalMaster™ Standard and Mini Cassette Tapes

Specifications

Recording/Playback performance

Recording format
1080/60i, 1080/50i, 480/60i (NTSC),
576/50i (PAL)
Playout/down conversion format
1080/60i, 1080/50i, 480/60i (NTSC),
576/50i (PAL), 480/60P, 576/50P,
720/60P, 720/50P
Tape speed
HDV/DV SP
Max. 18.812 mm/s
DVCAM
Max. 28.218 mm/s
Playback/recording time
HDV/DV SP
Max. 276 min with
PHDV-276DM cassette
Max. 63 min with
PHDVM-63DM cassette
DVCAM
Max. 184 min with
PHDV-276DM cassette
Max. 41 min with
PHDVM-63DM cassette
Fast forward/rewind time
Approx. 2 min with PHDV-276DM cassette

Input/Output connectors/devices

Video input/output
BNC x 2
Video signal: 1 Vp-p,
75 Ω unbalanced, sync negative
S-video input/output
Mini-DIN 4-pin x 2
Y: 1 Vp-p, 75 Ω unbalanced, sync negative
C: 0.286 Vp-p (NTSC), 0.3 Vp-p (PAL),
75 Ω unbalanced,
Component video output
BNC x 3
Y: 1 Vp-p (0.3 V, sync negative)
Pr/Pb (Cr/Cb): 700 mVp-p
(100% colour bar), input impedance 75 Ω
i.LINK
4-pin
HDMI output
19-pin (type A), video: 1080/60i, 1080/50i,
480/60i (NTSC), 576/50i (PAL), 720/60P,
720/50P, 480/60P, 576/50P, audio:
PCM 48 kHz/16-bit
Phones
Stereo minijack (\varnothing 3.5 mm), 8 Ω loading
LANC
Stereo mini-minijack (\varnothing 2.5 mm)
Control S
Stereo minijack (\varnothing 3.5 mm)
Audio input
RCA pin x 2
Input level: -10/-2/+4 dBu,
input impedance: min. 47 k Ω unbalanced
max. input level: -10: +18 dBu
(approx. 6 Vrms), -2: +24 dBu
(approx. 12.5 Vrms), +4:
+30 dBu (approx. 25 Vrms)

Audio output

RCA pin x 2
Output level: -10 dBu (full bit -20 dB),
impedance 47 k Ω , unbalanced in 60i
mode, -10 dBu (full bit -18 dB), impedance
47 k Ω , unbalanced in 50i mode
Impedance: max. 1 k Ω unbalanced
LCD monitor
2.7-inch* type, approx. 211,200 dots
(960 x 220), Clear Photo LCD Plus

General

Dimensions (W x H x D)
212 x 88 x 380.7 mm
(8 3/8 x 3 1/2 x 15 inches)
Mass
Approx. 4.3 kg (9 lb 8 oz)
Power requirements
AC 220 to 240 V, 50 Hz
Power consumption
12 W (playback mode
with LCD monitor on)
Operating temperature
5 to 40°C (41 to 104°F)
Storage temperature
-20 to +60°C (-4 to 140°F)

* Viewable area, measured diagonally

SONY

PDW-F330L	86
PDW-F330K	88
PDW-F350L	90
PDW-F70	92
PDW-F30	94

PDW-F330L XDCAM HD Camcorder (without lens)

Features

- MPEG HD (35/25/18 Mb/s) and DVCAM switchable recording
- Superb picture and sound quality
- 12-bit A/D conversion
- High-performance digital signal processing
- 1/2-inch type HD Power HAD EX CCD
- Long recording time; MPEG HD^(*) at 35 Mb/s: 69 min., 25 Mb/s: 92 min., 18 Mb/s: 122 min., DVCAM: 85 min.
- Shock- and dust-resistant disc drive
- 3.5-inch^(**) type colour LCD screen
- 2/3-inch-type lens can be used via the optional LO-32BMT adaptor^(***)
- 1.5-inch monochrome viewfinder (DXF-801) is supplied as standard. 2.0-inch monochrome viewfinder (DXF-20W) is also available as an option.
- Thumbnail Search operation
- Expand function
- Scene Selection operation
- Proxy AV (low-resolution audio and video) Data recording
- Metadata recording including essence mark, UMID, Extended UMID
- Progressive mode: 29.97P, 25P and native 23.98P
- Selectable gamma curves (five types)
- Picture cache recording function (up to 12 seconds)
- Interval recording function (MPEG HD Only)
- Slow shutter function
- Turbo gain function (max. 48 dB)
- Freeze Mix function
- Auto Tracing White Balance (ATW) capability
- HD analogue component^(*) output, SD analogue component^(**) output, SD analogue composite output and i.LINK (DV OUT and File Access Mode) as standard
- Down-conversion output via the SD component, composite, or i.LINK (DV OUT) connector
- Four assignable buttons
- Sony WRR-855 Series wireless microphone receiver can be easily attached to the camcorder via the optional CA-WR855 adaptor
- "Memory Stick" stores camera setup parameters
- Intelligent light system powered from the camcorder's battery
- Built-in optical filter wheel: Clear, 1/4ND, 1/16ND, 1/64ND
- Camera control from RM-B150/B750
- Simple Remote Commander unit is supplied.
- Compact and lightweight
- Low power consumption of 31 W



(*) In 2-ch audio mode (**) Viewable area measured diagonally (***) In this configuration, the resulting focal length will be 1.37 times the actual focal length of the lens. (**) 1080/23.98P recordings are output as 1080/59.94i signals via 2-3 pull-down conversion. (**) HD analogue component output and SD analogue component output share the same connectors.

Supplied Accessories

DXF-801 1.5-inch monochrome viewfinder (1)
 Electret condenser stereo microphone (1)
 Wind screen (1)
 Lens mount cap (1)
 Shoulder belt (1)
 Frange focal length adjustment test chart (1)
 IR Remote Commander unit (1)
 Operation manual (1)
 PDZ-1 proxy browsing software (1)
 XDCAM proxy viewer software (1)
 PFD23 Professional Disc (1)
 VCT-U14 Tripod Adaptor (1)

Optional Accessories

VCT-U14 Tripod Adaptor
 PFD23 Disc Professional Disc
 LO-32BMT 2/3-inch Lens Mount Adaptor
 DXF-20W 2.0-inch Monochrome Viewfinder
 DXF-51 5-inch Monochrome Viewfinder
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BP-L60S Rechargeable Lithium-ion Battery Pack
 BC-L70 Li-ion Battery Charger
 BC-M150 Ni-MH & Li-ion Battery Charger
 BC-L500 Li-ion Battery Charger
 AC-DN10 AC Adaptor/Charger
 RM-B150 Remote Control Unit
 RM-B750 Remote Control Unit
 CA-WR855 Camera Adaptor
 WRR-855A UHF Synthesized Diversity Tuner
 WRR-855B UHF Synthesized Diversity Tuner

WRR-861B UHF Synthesized Diversity Tuner
 WRR-861A UHF Synthesized Diversity Tuner
 WRR-862A UHF Synthesized Dual Diversity Tuner
 WRR-862B UHF Synthesized Dual Diversity Tuner
 ECM-674 Electret Condenser Microphone
 ECM-678 Electret Condenser Microphone
 LC-H300 Hard Carrying Case
 LC-DS300SFT Soft Carrying Case
 LCR-1 Camera Rain Cover
 MSH "Memory Stick" IC Memory Media
 CCF-L Cables DV Cables (6-pin to 6-pin)
 CCFD-L Cables DV Cables (6-pin to 4-pin)
 VMC-IL46 Cables i.LINK Cable (4-pin to 6-pin)
 VMC-IL66 Cables i.LINK Cable (6-pin to 6-pin)

Specifications

General

Mass:

Approx. 3.8 kg (body, 8 lb 6 oz)

Power requirements:

DC 12 V +5.0 V/-1.0 V

Power consumption

Approx. 31 W

Operating temperature:

5 to 40 °C (+32 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

10 to 90% (relative humidity)

Continuous operating time:

Approx. 160 min. w/BP-GL95 battery

Recording format

Video:

DVCAM (25 Mb/s)

MPEG HD (MPEG-2 MP@HL)

HQ mode (VBR, maximum bit rate:

35 Mb/s)

SP mode (CBR 25 Mb/s)

LP mode (VBR, maximum bit rate:

18 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG HD: 4ch or 2ch, 16 bits/48 kHz

DVCAM: 4ch, 16 bits/48 kHz

Proxy Audio:

A-law (4ch / 2ch, 8 bit, 8 kHz)

Recording/Playback time

DVCAM:

Approx. 85 min.

MPEG HD (HQ mode):

Audio 2ch: approx. 69 min. /

Audio 4ch: approx. 66 min.

MPEG HD (SP mode):

Audio 2ch: approx. 92 min. /

Audio 4ch: approx. 87 min.

MPEG HD (LP mode):

Audio 2ch: approx. 122 min. /

Audio 4ch: approx. 113 min.

Signal inputs

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Audio input:

XLR-3pin (Female) x2, line /

mic / mic +48 V selectable

Mic input:

XLR-5-pin (Female, stereo) x1

Signal outputs

Component (HD/SD analogue) video output:

BNC x3, Y/Pb/Pr, 1.0 Vp-p, 75 Ω

Composite video output:

BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack x1 (stereo)

Audio output (CH-1/CH-2):

Pin-jacks x2, -10 dBu, 47 Ω

Other inputs/outputs

Timecode input:

BNC x1 (input or output, selectable),

(input: 0.5 to 18 Vp-p, 10 kΩ,

output: 1.0Vp-p, 75 Ω)

Timecode output:

BNC x1 (input or output, selectable),

(input: 0.5 to 18 Vp-p, 10 kΩ,

output: 1.0 Vp-p, 75 Ω)

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR-4-pin (Male) x1

DC output:

4-pin (for wireless microphone receiver),

DC 12 V (MAX 0.2 A)

i.LINK:

IEEE 1394, 6-pin x1,

AV/C (DV stream output) or

File Access Mode

Audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB

Distortion:

Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

Below measurable limit

Wow & flutter:

Below measurable limit

Headroom:

20/18/16/12 dB (selectable)

Camera section

Pickup device:

3-chip 1/2-inch type HD Power HAD CCD

Effective picture elements:

Approx. 1.56 Mega Pixels (1,440 x 1,080)

Optical system:

F1.4 prism

Built-in optical filters:

1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

Shutter speed

59.94i:

1/100, 1/125, 1/250, 1/500, 1/1000,

1/2000, ECS, SLS

29.97P:

1/40, 1/60, 1/120, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS, SLS

23.98P:

1/32, 1/48, 1/96, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS

50i:

1/60, 1/125, 1/250, 1/500, 1/1000,

1/2000, ECS, SLS

25P:

1/33, 1/50, 1/100, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS, SLS

Slow Shutter (SLS):

1 to 8, 16, 32, and 64 frame accumulation

Lens mount:

SONY 1/2-inch type bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

F9 (typical)

Minimum illumination:

Approx. 0.004 lx (F1.4 lens, +48 dB

turbo gain, with 64 frame accumulation)

Gain selection:

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB

Smear level:

-120 dB (typical)

S/N ratio:

54 dB (typical, HD output)

Modulation depth at 21 MHz:

45% (typical)

Geometric distortion:

Below measurable level (w/o lens)

Viewfinder

CRT:

1.5-inch type monochrome

Indicators:

REC (x2), TALLY, BATT, SHUTTER, GAIN UP

Built-in LCD monitor

3.5-inch type colour LCD monitor

PDW-F330K XDCAM HD Camcorder (with lens)

Features

- MPEG HD (35/25/18 Mb/s) and DVCAM switchable recording
- Superb picture and sound quality
- 12-bit A/D conversion
- High-performance digital signal processing
- 1/2-inch type HD Power HAD EX CCD
- Long recording time; MPEG HD^(*) at 35 Mb/s: 69 min., 25 Mb/s: 92 min., 18 Mb/s: 122 min., DVCAM: 85 min.
- Shock- and dust-resistant disc drive
- 3.5-inch^(**) type colour LCD screen
- The VCL-719BXS Auto Focus Lens is supplied.
- 2/3-inch-type lens can be used via the optional LO-32BMT adaptor^(**)
- 1.5-inch monochrome viewfinder (DXF-801) is supplied as standard. 2.0-inch monochrome viewfinder (DXF-20W) is also available as an option.
- Thumbnail Search operation
- Expand function
- Scene Selection operation
- Proxy AV (low-resolution audio and video) Data recording
- Metadata recording including essence mark, UMID, Extended UMID
- Progressive mode: 29.97P, 25P and native 23.98P
- Selectable gamma curves (five types)
- Picture cache recording function (up to 12 seconds)
- Interval recording function (MPEG HD Only)
- Interval recording function
- Slow shutter function
- Turbo gain function (max. 48 dB)
- Freeze Mix function
- Auto Tracing White Balance (ATW) capability
- Auto focus operation
- HD analogue component^(*) output, SD analogue component^(*) output, SD analogue composite output and i.LINK (DV OUT and File Access Mode) as standard
- Down-conversion output via the SD component, composite, or i.LINK (DV OUT) connector
- Four assignable buttons
- Sony WRR-855 Series wireless microphone receiver can be easily attached to the camcorder via the optional CA-WR855 adaptor
- "Memory Stick" stores camera setup parameters
- Intelligent light system powered from the camcorder's battery
- Built-in optical filter wheel: Clear, 1/4ND, 1/16ND, 1/64ND
- Camera control from RM-B150/B750
- Simple Remote Commander unit is supplied.
- Compact and lightweight
- Low power consumption of 31 W

(*) In 2-ch audio mode (**) Viewable area measured diagonally

(*) In this configuration, the resulting focal length will be 1.37 times the actual focal length of the lens. (**) 1080/23.98P recordings are output as 1080/59.94i signals via 2-3 pull-down conversion. (**) HD analogue component output and SD analogue component output share the same connectors.

Supplied Accessories

VCL-719BXS (1)
DXF-801 1.5-inch monochrome viewfinder (1)
Electret condenser stereo microphone (1)
Wind screen (1)
Lens mount cap (1)
Shoulder belt (1)
Frame focal length adjustment test chart (1)
IR Remote Commander unit (1)
Operation manual (1)
PDZ-1 proxy browsing software (1)
XDCAM proxy viewer software (1)
PFD23 Professional Disc (1)
VCT-U14 Tripod Adaptor (1)

Optional Accessories

VCT-U14 Tripod Adaptor
PFD23 Disc Professional Disc
LO-32BMT 2/3-inch Lens Mount Adaptor
DXF-20W 2.0-inch Monochrome Viewfinder
DXF-51 5-inch Monochrome Viewfinder
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-L60S Rechargeable Lithium-ion Battery Pack
BC-L70 Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
BC-L500 Li-ion Battery Charger
AC-DN10 AC Adaptor/Charger
RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
CA-WR855 Camera Adaptor
WRR-855A UHF Synthesized Diversity Tuner
WRR-855B UHF Synthesized Diversity Tuner

WRR-861B UHF Synthesized Diversity Tuner
WRR-861A UHF Synthesized Diversity Tuner
WRR-862A UHF Synthesized Dual Diversity Tuner
WRR-862B UHF Synthesized Dual Diversity Tuner
ECM-674 Electret Condenser Microphone
ECM-678 Electret Condenser Microphone
LC-H300 Hard Carrying Case
LC-DS300SFT Soft Carrying Case
LCR-1 Camera Rain Cover
MSH "Memory Stick" IC Memory Media
CCF-L Cables DV Cables (6-pin to 6-pin)
CCFD-L Cables DV Cables (6-pin to 4-pin)
VMC-IL46 Cables i.LINK Cable (4-pin to 6-pin)
VMC-IL66 Cables i.LINK Cable (6-pin to 6-pin)



Specifications

General

Mass:

Approx. 3.8 kg (body, 8 lb 6 oz)

Power requirements:

DC 12 V +5.0 V/-1.0 V

Power consumption

Approx. 31 W

Operating temperature:

-5 to 40 °C (+32 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

10 to 90% (relative humidity)

Continuous operating time:

Approx. 160 min. w/BP-GL95 battery

Recording format

Video:

DVCAM (25 Mb/s)

MPEG HD (MPEG-2 MP@HL)

HQ mode (VBR, maximum bit rate:

35 Mb/s)

SP mode (CBR 25 Mb/s)

LP mode (VBR, maximum bit rate:

18 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG HD: 4ch or 2ch, 16 bits/48 kHz

DVCAM: 4ch, 16 bits/48 kHz

Proxy Audio:

A-law (4ch / 2ch, 8 bit, 8 kHz)

Recording/Playback time

DVCAM:

Approx. 85 min.

MPEG HD (HQ mode):

Audio 2ch: approx. 69 min. /

Audio 4ch: approx. 66 min.

MPEG HD (SP mode):

Audio 2ch: approx. 92 min. /

Audio 4ch: approx. 87 min.

PEG HD (LP mode):

Audio 2ch: approx. 122 min. /

Audio 4ch: approx. 113 min.

Signal inputs

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Audio input:

XLR-3pin (Female) x2, line / mic /

mic +48 V selectable

Mic input:

XLR-5-pin (Female, stereo) x1

Signal outputs

Component (HD/SD analogue) video output:

BNC x3, Y/Pb/Pr, 1.0 Vp-p, 75 Ω

Composite video output:

BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack x1 (stereo)

Audio output (CH-1/CH-2):

Pin-jacks x2, -10 dBu, 47 Ω

Other inputs/outputs

Timecode input:

BNC x1 (input or output, selectable),

(input: 0.5 to 18 Vp-p, 10 kΩ,

output: 1.0 Vp-p, 75 Ω)

Timecode output:

BNC x1 (input or output, selectable),

(input: 0.5 to 18 Vp-p, 10 kΩ,

output: 1.0 Vp-p, 75 Ω)

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR-4-pin (Male) x1

DC output:

4-pin (for wireless microphone receiver),

DC 12 V (MAX 0.2 A)

i.LINK:

IEEE 1394, 6-pin x1, AV/C

(DV stream output) or File Access Mode

Audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB

Distortion:

Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

Below measurable limit

Wow & flutter:

Below measurable limit

Headroom:

20/18/16/12 dB (selectable)

Camera section

Pickup device:

3-chip 1/2-inch type HD Power HAD CCD

Effective picture elements:

Approx. 1.56 Mega Pixels (1,440 x 1,080)

Optical system:

F1.4 prism

Built-in optical filters:

1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

Shutter speed

59.94i:

1/100, 1/125, 1/250, 1/500, 1/1000,

1/2000, ECS, SLS

29.97P:

1/40, 1/60, 1/120, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS, SLS

23.98P:

1/32, 1/48, 1/96, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS

50i:

1/60, 1/125, 1/250, 1/500, 1/1000,

1/2000, ECS, SLS

25P:

1/33, 1/50, 1/100, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS, SLS

Slow Shutter (SLS):

1 to 8, 16, 32, and 64 frame accumulation

Lens mount:

SONY 1/2-inch type bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

F9 (typical)

Minimum illumination:

Approx. 0.004 lx (F1.4 lens, +48 dB

turbo gain, with 64 frame accumulation)

Gain selection:

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB

Smear level:

-120 dB (typical)

S/N ratio:

54 dB (typical, HD output)

Modulation depth at 21 MHz:

45% (typical)

Geometric distortion:

Below measurable level (w/o lens)

Viewfinder

CRT:

1.5-inch type monochrome

Indicators:

REC (x2), TALLY, BATT, SHUTTER,

GAIN UP

Built-in LCD monitor

3.5-inch type colour LCD monitor

PDW-F350L XDCAM HD Camcorder (without lens)

Features

- MPEG HD (35/25/18 Mb/s) and DVCAM switchable recording
- Superb picture and sound quality
- 12-bit A/D conversion
- High-performance digital signal processing
- 1/2-inch type HD Power HAD EX CCD
- Long recording time; MPEG HD^{(*)1} at 35 Mb/s: 69 min., 25 Mb/s: 92 min., 18 Mb/s: 122 min., DVCAM: 85 min.
- Shock- and dust-resistant disc drive
- 3.5-inch^{(*)2} type colour LCD screen
- 2/3-inch-type lens can be used via the optional LO-32BMT adaptor^{(*)3}
- 2.0-inch monochrome viewfinder (DXF-20W) is supplied as standard.
- Thumbnail Search operation
- Expand function
- Scene Selection operation
- Proxy AV (low-resolution audio and video) Data recording
- Metadata recording including essence mark, UMID, Extended UMID
- Progressive mode: 29.97P, 25P and native 23.98P
- Slow & Quick Motion function (MPEG HD Only)
- Selectable gamma curves (five types)
- Picture cache recording function (up to 12 seconds)
- Interval recording function (MPEG HD Only)
- Slow shutter function
- Turbo gain function (max. 48 dB)
- Freeze Mix function
- Auto Tracing White Balance (ATW) capability
- HD-SDI^{(*)4} output, SD analogue composite output and i.LINK (DV OUT and File Access Mode) as standard
- Down-conversion output via the SD composite, or i.LINK (DV OUT) connector
- Four assignable buttons
- Sony WRR-855 Series wireless microphone receiver can be easily attached to the camcorder via the optional CA-WR855 adaptor
- "Memory Stick" stores camera setup parameters
- Intelligent light system powered from the camcorder's battery
- Built-in optical filter wheel: Clear, 1/4ND, 1/16ND, 1/64ND
- Camera control from RM-B150/B750
- Simple Remote Commander unit is supplied
- Compact and lightweight
- Low power consumption of 32 W

(*)1 In 2-ch audio mode (*)2 Viewable area measured diagonally (*)3 In this configuration, the resulting focal length will be 1.37 times the actual focal length of the lens. (*)4 1080/23.98P recordings are output as 1080/59.94i signals via 2-3 pull-down conversion.



Supplied Accessories

DXF-20W 2.0-inch Monochrome Viewfinder (1)
 Electret condenser stereo microphone (1)
 Wind screen (1)
 Lens mount cap (1)
 Shoulder belt (1)
 Fringe focal length adjustment test chart (1)
 IR Remote Commander unit (1)
 Operation manual (1)
 PDZ-1 proxy browsing software (1)
 XDCAM proxy viewer software (1)
 PFD23 Professional Disc (1)
 VCT-U14 Tripod Adaptor (1)

Optional Accessories

DXF-20W 2.0-inch Monochrome Viewfinder
 VCT-U14 Tripod Adaptor
 PFD23 Disc Professional Disc
 LO-32BMT 2/3-inch Lens Mount Adaptor
 DXF-51 5-inch Monochrome Viewfinder
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BP-L60S Rechargeable Lithium-ion Battery Pack
 BC-L70 Li-ion Battery Charger
 BC-M150 Ni-MH & Li-ion Battery Charger
 BC-L500 Li-ion Battery Charger
 AC-DN10 AC Adaptor/Charger
 RM-B150 Remote Control Unit
 RM-B750 Remote Control Unit
 CA-WR855 Camera Adaptor
 WRR-855A UHF Synthesized Diversity Tuner
 WRR-855B UHF Synthesized Diversity Tuner
 WRR-861B UHF Synthesized Diversity Tuner
 WRR-861A UHF Synthesized Diversity Tuner

WRR-862A UHF Synthesized Dual Diversity Tuner
 WRR-862B UHF Synthesized Dual Diversity Tuner
 ECM-674 Electret Condenser Microphone
 ECM-678 Electret Condenser Microphone
 LC-H300 Hard Carrying Case
 LC-DS300SFT Soft Carrying Case
 LCR-1 Camera Rain Cover
 MSH "Memory Stick" IC Memory Media
 CCF-L Cables DV Cables (6-pin to 6-pin)
 CCFD-L Cables DV Cables (6-pin to 4-pin)
 VMC-IL46 Cables i.LINK Cable (4-pin to 6-pin)
 VMC-IL66 Cables i.LINK Cable (6-pin to 6-pin)

Specifications

General

Mass:

Approx. 3.85 kg (body, 8 lb 7 oz)

Power requirements:

DC 12 V +5.0 V/-1.0 V

Power consumption:

Approx. 31 W (while recording, with viewfinder, colour LCD ON, manual lens)

Operating temperature:

-5 to 40 °C (+32 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

10 to 90% (relative humidity)

Continuous operating time:

Approx. 160 min. w/BP-GL95 battery

Recording format

Video:

DVCAM (25 Mb/s)

MPEG HD (MPEG-2 MP@HL)

HQ mode (VBR, maximum bit rate :

35 Mb/s)

SP mode (CBR 25 Mb/s)

LP mode (VBR, maximum bit rate :

18 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG HD: 4ch or 2ch, 16 bits/48 kHz

DVCAM: 4ch, 16 bits/48 kHz

Proxy Audio:

A-law (4ch / 2ch, 8 bit, 8 kHz)

Recording/Playback time

DVCAM:

Approx. 85 min.

MPEG HD (HQ mode):

Audio 2ch: approx. 69 min. /

Audio 4ch: approx. 66 min. /

MPEG HD (SP mode):

Audio 2ch: approx. 92 min. /

Audio 4ch: approx. 87 min. /

MPEG HD (LP mode):

Audio 2ch: approx. 122 min. /

Audio 4ch: approx. 113 min.

Signal inputs

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Audio input:

XLR-3pin (Female) x2, line / mic /

mic +48 V selectable

Mic input:

XLR-5-pin (Female, stereo) x1

Signal outputs

HD-SDI output:

BNC x1, SMPTE 292M (w/embedded audio, MPEG HD mode only)

Composite video output:

BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack x1 (stereo)

Audio output (CH-1/CH-2):

XLR-5-pin (Male, stereo) x1

Other inputs/outputs

Timecode input:

BNC x1, 0.5 to 18 Vp-p, 10 Ω

Timecode output:

BNC x1, 1.0 Vp-p, 75 Ω

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR-4-pin (Male) x1

DC output:

4-pin (for wireless microphone receiver),

DC 12 V (MAX 0.2 A)

i.LINK:

IEEE 1394, 6-pin x1, AV/C

(DV stream output) or File Access Mode

Audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB

Distortion:

Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

Below measurable limit

Wow & flutter:

Below measurable limit

Headroom:

20/18/16/12 dB (selectable)

Camera section

Pickup device:

3-chip 1/2-inch type HD Power HAD CCD

Effective picture elements:

Approx. 1.56 Mega Pixels (1,440 x 1,080)

Optical system:

F1.4 prism

Built-in optical filters:

1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

Shutter speed

59.94i:

1/100, 1/125, 1/250, 1/500, 1/1000,

1/2000, ECS, SLS

29.97P:

1/40, 1/60, 1/120, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS, SLS

23.98P:

1/32, 1/48, 1/96, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS

50i:

1/60, 1/125, 1/250, 1/500, 1/1000,

1/2000, ECS, SLS

25P:

1/33, 1/50, 1/100, 1/125, 1/250, 1/500,

1/1000, 1/2000, ECS, SLS

Slow Shutter (SLS): "Slow & Quick Motion

function ("MPEG HD mode only")

1 to 8, 16, 32, and 64 frame accumulation

23.98P/29.97P:

Selectable from 4 to 60 frame/sec

as recording frame rate

25P:

Selectable from 4 to 50 frame/sec

as recording frame rate

Lens mount:

SONY 1/2-inch type bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

F9 (typical)

Minimum illumination:

Approx. 0.004 lx (F1.4 lens, +48 dB

turbo gain, with 64 frame accumulation)

Gain selection:

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB

Smear level:

-120 dB (typical)

S/N ratio:

54 dB (typical, HD output)

Modulation depth at: 21 MHz

45% (typical)

Geometric distortion:

Below measurable level (w/o lens)

Viewfinder

CRT:

2.0-inch type monochrome

Indicators:

REC (x2), TALLY, BATT, SHUTTER,

GAIN UP

Built-in LCD monitor

3.5-inch type colour LCD monitor

PDW-F70 XDCAM HD Recording Deck

Features

- MPEG HD recording at 35, 25 and 18 Mb/s via HD-SDI, HD analogue component and RGB input (HD analogue component and RGB input requires the optional PDBK-103 board)
- Also records MXF files (in both MPEG HD and DVCAM formats) via i.LINK (File Access Mode) or Ethernet^(*) interface.
- Playback of MPEG HD and DVCAM material
- Proxy AV (low-resolution audio and video) Data recording
- Long recording/playback time; MPEG HD^(**) at 35 Mb/s: 69 min., 25 Mb/s: 92 min., 18 Mb/s: 122 min.
- Up-conversion recording (require the optional PDBK-104 board): Input from SD-SDI or SD composite connectors can be recorded in the MPEG HD format.
- Down-conversion output: MPEG HD playback can be converted to SD signals and output via the SD-SDI, SD composite and i.LINK (DV OUT) connectors.
- Up-conversion output: DVCAM playback can be converted to 1080i HD signals and output via HD connectors.
- Thumbnail Search operation
- Expand function
- Scene Selection operation
- Search speed (in colour) - JOG: -1 ~ +2 times normal speed, Variable: -1 ~ +2 times normal speed, Shuttle: ± 20 times normal speed
- 3.5-inch^(***) type colour LCD screen
- Repeat playback function
- Simple Remote Commander unit is supplied.
- Gigabit Ethernet capability (requires the optional PDBK-101 board)
- Input and output of 25 Mb/s HDV stream (MPEG-2 TS) (requires the optional PDBK-102 board)
- Ability to write EDL data (Clip List) back onto disc
- Metadata recording
- A wide variety of video interfaces including HD-SDI I/O, HD analogue component output, RGB output, SD-SDI output, SD analogue composite output, i.LINK (DV OUT and File Access Mode) as standard
- Compact and lightweight design; can be placed either horizontally or vertically
- Compatible with the PDJ-A640 XDCAM cart

(*1) Ethernet interface requires the optional PDBK-101 board.

(*2) In 2-ch audio mode (*3) Viewable area measured diagonally



Supplied Accessories

Operation manual (1)

Vertical installation stand (1)

IR Remote Commander unit (1)

PDZ-1 proxy browsing software (1)

XDCAM proxy viewer software (1)

Optional Accessories

PFD23 Disc Professional Disc

PDBK-101 Network Board

PDBK-102 MPEG-2 TS In/Out Board

PDBK-103 HD Analogue Input Board

PDBK-104 SD Input Upconverter Board

PDBK-A640 Cart Mount Kit

RM-280 Editing Controller

RCC-G Cables 9-pin/9-pin Cable

VMC-IL46 Cables i.LINK Cable (4-pin to 6-pin)

VMC-IL66 Cables i.LINK Cable (6-pin to 6-pin)

Specifications

General

Power requirements:

100 V to 240 V AC, 50/60 Hz

Power consumption:

70 W

Operating temperature:

+5 to +40 °C (+41 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

20 to 90% (relative humidity)

Mass:

7.2 kg

Dimensions (W x H x D):

307 x 100 x 411 mm
(12 1/8 x 4 x 16 1/2 inches)

Recording format

Video:

MPEG HD (MPEG-2 MP@HL): HQ mode
(VBR, maximum bit rate : 35 Mb/s),
SP mode (CBR, 25 Mb/s), LP mode
(VBR, maximum bit rate : 18 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG HD: 4 ch or 2 ch, 16 bits/48 kHz

Proxy Audio:

A-law (4 ch / 2 ch, 8 bit, 8 kHz)

Playback format

Video:

MPEG HD (MPEG-2 MP@HL): HQ mode
(VBR, maximum bit rate : 35 Mb/s),
SP mode (CBR, 25 Mb/s), LP mode
(VBR, maximum bit rate : 18 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG HD: 4 ch or 2 ch, 16 bits/48 kHz
DVCAM: 4 ch, 16 bit/48 kHz

Proxy Audio:

A-law (4 ch / 2 ch, 8 bit, 8 kHz)

Recording/playback time

MPEG HD (HQ mode):

Audio 2ch : approx. 69 min.,

Audio 4ch : approx. 66 min.

MPEG HD (SP mode):

Audio 2ch : approx. 92 min.,

Audio 4ch : approx. 87 min.

MPEG HD (LP mode):

Audio 2ch : approx. 122 min.,

Audio 4ch : approx. 113 min.

DVCAM:

Approx. 85 min. (playback only)

Search speed (in colour)

Jog mode:

-1 ~ +2 times normal speed

Variable mode:

-1 ~ +2 times normal speed

Shuttle mode:

±20 times normal speed

Signal inputs

Analogue reference input:

BNCx2 (including loop through),
HD Tri-level sync or SD composite sync
(0.3 Vp-p/75 Ω/sync negative)

Analogue composite input

(option: PDBK-104):

BNCx1, RS-170M

Analogue HD component input

(option: PDBK-103):

BNC x4, Y/Pb/Pr/(Sync) or G/B/R/(Sync)

HD-SDI input:

BNCx1, SMPTE 292M

SD-SDI input (option: PDBK-104):

BNCx1, SMPTE 259M

Analogue audio input:

XLR x2 (channel selectable),

+4/0/-3/-6 dBu (selectable),

10 kΩ, balanced

Digital audio input:

AES/EBU, BNCx2, 4 channels

Timecode input:

BNCx1, SMPTE Time code

Signal outputs

Analogue composite video output:

BNCx1, (1.0 Vp-p/75 Ω/sync negative) ,

RCA-pinx1, (1.0 Vp-p/75 Ω/sync negative)

Monitor output:

D-sub 15-pin (G/B/R or Y/Pb/Pr)

Built-in display:

3.5-inch type colour LCD monitor

HD-SDI output:

BNCx2, SMPTE 292M

SD-SDI output:

BNCx1, SMPTE 259M

Analogue audio output:

XLRx2 (channel selectable),

+4/0/-3/-6 dBu (selectable),

600 Ω load, balanced

Audio monitor output:

RCAX2 (L, R, Mix), -6dBu,

47 kΩ, unbalanced

Headphone output:

Stereo phone jack, -14dBu,

8 Ω, unbalanced

Digital audio output:

AES/EBU, BNCx2, 4 channels

Timecode output:

BNCx1, SMPTE Timecode

Other inputs/outputs

i.LINK:

IEEE1394, 6-pin x1,

AV/C (DV stream output) or

File Access Mode

i.LINK(HDV 1080i) (option: PDBK-102):

IEEE1394, 6-pin x1, HDV 1080i IN/OUT

Ethernet (option: PDBK-101):

1000Base-T (RJ-45)

RS-422A:

D-sub 9-pin x 1

RS-232C:

D-sub 9-pin x 1

CONTROL:

Mini-jack 4-pin

Video performance

Sampling frequency:

Y: 74.25MHz, R-Y/B-Y: 37.125MHz

Quantization:

8 bits/sample

PDW-F30 XDCAM HD Viewing Deck

Features

- Playback of MPEG HD and DVCAM material
- Records MXF files (in both MPEG HD and DVCAM formats) via i.LINK (File Access Mode) or Ethernet^{(*)1} interface.
- Proxy AV (low-resolution audio and video) Data recording
- Long playback time; MPEG HD^{(*)2} at 35 Mb/s: 69 min., 25 Mb/s: 92 min., 18 Mb/s: 122 min.
- Down-conversion output: MPEG HD playback can be converted to SD signals and output via the SD-SDI, SD composite and i.LINK (DV OUT) connectors.
- Up-conversion output: DVCAM playback can be converted to 1080i HD signals and output via HD connectors.
- Thumbnail Search operation
- Expand function
- Scene Selection operation
- Search speed (in colour) - JOG: -1 ~ +2 times normal speed, Variable: -1 ~ +2 times normal speed, Shuttle: ±20 times normal speed
- 3.5-inch^{(*)3} type colour LCD screen
- Repeat playback function
- Simple Remote Commander unit is supplied.
- Gigabit Ethernet capability (requires the optional PDBK-101 board)
- Input and output of 25 Mb/s HDV stream (MPEG-2 TS) (requires the optional PDBK-102 board)
- Ability to write EDL data (Clip List) back onto disc
- Metadata recording
- Compact and lightweight design; can be placed either horizontally or vertically
- Compatible with the PDJ-A640 XDCAM cart



(*)1 Ethernet interface requires the optional PDBK-101 board.

(*)2 In 2-ch audio mode (*)3 Viewable area measured diagonally

Supplied Accessories

Operation manual (1)
 Vertical installation stand (1)
 IR Remote Commander unit (1)
 PDZ-1 proxy browsing software (1)
 XDCAM proxy viewer software (1)

Optional Accessories

PFD23 Disc Professional Disc
 PDBK-101 Network Board
 PDBK-102 MPEG-2 TS In/Out Board
 RM-280 Editing Controller
 RCC-G Cables 9-pin/9-pin Cable
 VMC-IL46 Cables i.LINK Cable (4-pin to 6-pin)
 VMC-IL66 Cables i.LINK Cable (6-pin to 6-pin)

Specifications

General

Power requirements:

100 V to 240 V AC, 50/60 Hz

Power consumption:

70 W

Operating temperature:

+5 to +40 °C (+41 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

20 to 90% (relative humidity)

Mass:

7.2 kg

Dimensions (W x H x D):

307 x 100 x 411 mm
(12 1/8 x 4 x 16 1/2 inches)

Recording format

Proxy Video:

MPEG-4

Proxy Audio:

A-law (4 ch / 2 ch, 8 bit, 8 kHz)

Playback format

Video:

MPEG HD (MPEG-2 MP@HL):

HQ mode (VBR, maximum bit rate :

35 Mb/s), SP mode (CBR, 25 Mb/s),

LP mode (VBR, maximum bit rate :

18 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG HD: 4 ch or 2 ch, 16 bits/48 kHz,

DVCAM: 4 ch, 16 bit/48 kHz

Proxy Audio:

A-law (4 ch / 2 ch, 8 bit, 8 kHz)

Recording/playback time

MPEG HD (HQ mode):

Audio 2ch : approx. 69 min.,

Audio 4ch : approx. 66 min.

MPEG HD (SP mode):

Audio 2ch : approx. 92 min.,

Audio 4ch : approx. 87 min.

MPEG HD (LP mode):

Audio 2ch : approx. 122 min.,

Audio 4ch : approx. 113 min.

DVCAM:

Approx. 85 min. (playback only)

Search speed (in colour)

Jog mode:

-1 ~ +2 times normal speed

Variable mode:

-1 ~ +2 times normal speed

Shuttle mode:

±20 times normal speed

Signal outputs

Analogue composite video output:

BNCx1, (1.0 Vp-p/75 Ω/sync negative),

RCA-pinx1, (1.0 Vp-p/75 Ω/sync negative)

Monitor output

D-sub 15-pin (G/B/R or Y/Pb/Pr)

Built-in display:

3.5-inch type colour LCD monitor

HD-SDI output:

BNCx2, SMPTE 292M

SD-SDI output:

BNCx1, SMPTE 259M

Analogue audio output:

XLRx2 (channel selectable),

+4/0/-3/-6 dBu (selectable),

600 Ω load, balanced

Audio monitor output:

RCAx2 (L, R, Mix), -6dBu,

47 kΩ, unbalanced

Headphone output:

Stereo phone jack, -14dBu,

8 Ω, unbalanced

Digital audio output:

AES/EBU, BNCx2, 4 channels

Timecode output:

BNCx1, SMPTE Timecode

Other inputs/outputs

i.LINK:

IEEE1394, 6-pin x1,

AV/C (DV stream output) or

File Access Mode

i.LINK (HDV 1080i) (option: PDBK-102):

IEEE1394, 6-pin x1, HDV 1080i IN/OUT

Ethernet (option: PDBK-101):

1000Base-T (RJ-45)

RS-422A:

D-sub 9-pin x 1

RS-232C:

D-sub 9-pin x 1

Video performance

Sampling frequency:

Y: 74.25MHz, R-Y/B-Y: 37.125MHz

Quantization:

8 bits/sample

Analogue composite output (DV):

Frequency response : 0 to 4.2 MHz

+1.0/-3.0 dB (525), 0 to 4.8 MHz

+1.0/-3.0 dB (625), S/N(Y) : 53 dB or more,

Y/C delay (K2T) : ±25 ns or less ,

K-factor(K2T) : 2% or less

Processor adjustment range

Video level:

±3 dB

Chroma level:

±3 dB

Set up/black level:

±30 IRE

Chroma phase:

±30 deg

Audio performance

Sampling frequency:

48 kHz

Quantization

16 bits/2 channels or 16 bits / 4 channels

Frequency response:

20 Hz to 20 kHz +0.5/-1.0 dB

(0 dB at 1 kHz)

Dynamic range:

90 dB or more

Distortion

0.05% or less (at 1 kHz)

Headroom:

20/18/16/12 dB (selectable)

SONY

HDW-F900R	98
HDW-750P	100
HDW-730S	102
HDW-2000	104
HDW-D2000	106
HDW-M2000P	108
HDW-M2100P	110
HDW-1800	112
HDW-D1800	114
HDW-S280/1	116
HKJ-101	118
J-H1	119
J-H3	120

HDW-F900R HDCAM Camcorder

Features

- CineAlta camcorder •Superb picture quality of the HDCAM format •3-chip 2/3-type FIT CCD with 2.2 million pixels •12-bit A/D converter for enriched picture tonal reproduction •High-quality audio recording •Even with the viewfinder, battery, cassette, microphone, and a small variable or fixed-focal length lens, the total weight is only approximately 5.4 kg (12 lb). •Dual HD-SDI outputs as standard •Two independent filter wheels: ND and CC •Electronic shutter •Gamma Balance function: RGB Gamma Balance and Black Gamma •HyperGamma function •User Gamma Capability for quickly setup and loading the gamma curves being edited by the CVP File Editor gamma creation software •Multi-matrix function •TruEye function •Stop-motion and time-lapse recording with the optional HKDW-703 Picture Cache Board •Assignable buttons •Adjustable shoulder pad •LCD status panel for easy verification of camcorder's status •Equipped with microphone volume protection cover •A wide variety of optional accessories from Sony and film-related manufactures for digital cinematography



Supplied Accessories

Microphone, Super cardioid directional,
external power supply type (1)
XLR connector cover (4)
Shoulder strap (1)
Operation guide (1)
Operation manual (1)
Operation manual CD-ROM (1)

Optional Accessories

VCT-14, Tripod Adapter
HDVF-C30W, HD LCD Colour Viewfinder
(does not include microphone holder)
HDVF-20A, CRT B/W Viewfinder (includes
microphone holder)
BP-GL65/GL95/L60S/L80S, Info Li-Ion Battery
BC-M150/L70, BC-L500 Battery Charger
AC-DN10, AC Adapter
BCT-6HD/12HD/22HD/32HD/40HD,
HDCAM Tape Cassette
BKW-401, Viewfinder Rotation Bracket
RM-B750, Remote Control Unit
RM-B150, Remote Control Unit
WRR-855B, Slot-in Wireless Diversity Receiver
WRR-862B, Dual Diversity Microphone Receiver
A-8278-057-A, Mounting Bracket for WRR-862B
ECM-674/678, Shotgun Microphone
CAC-12, Microphone Holder
WRT-8B, Belt Pack Transmitter
WRT-847B, UHF Handheld Microphone
ECM-88B, Lavalier Microphone
LC-DN7, Hard Carrying Case
LC-DS300SFT, Soft Carrying Case
Maintenance Manual
HKDW-702, Down Converter Board
HKDW-703, Picture Cache Board
HKDW-902R, 2-3 Pull-down/Down Converter Board
HKDW-905R, Slow Shutter/Image Inverter Board
Part No. 1-547-341-11, Fog-proof Filter
Part No. 3-174-685-01, 1/8 ND Filter
Part No. 3-174-683-01, 1/32 ND Filter
Part No. 3-174-682-01, Cross Filter

Part No. 3-186-442-01, Mounting Ring
Part No. A-8314-798-A, Viewfinder Eyepiece
(High performance x3, with soft cushion)
Part No. A-8262-537-A, Viewfinder Eyepiece
(High magnification)
Part No. A-8262-538-A, Viewfinder Eyepiece
(Low magnification)
Part No. A-8267-737-A, Viewfinder Eyepiece
(Standard magnification with special compensation
for aberrations)

Specifications

General

Mass

5.4 kg (11 lb. 14 oz) with typical ENG lens, cassette and BP-GL95 Battery

Power requirement

DC 12 V (+5.0 V/-1.0 V)

Power consumption

38 W (With 12 V power supply, REC mode, with HDVF-20A)

Operating temperature

0 °C to +40 °C (+32 °F to +104 °F)

Storage temperature

-20 °C to +60 °C (-4 °F to +140 °F)

Operating humidity

25 % to 85 % (Relative humidity)

Continuous operating time

110 min (With BP-GL95)

Inputs/outputs

Genlock video input

BNC, 1.0 Vp-p 75 Ω

Time code input

BNC, 0.5 V to 18 Vp-p, 10 k Ω

Audio CH1/CH2 input

XLR-3-pin type (Female),
-60 dBu/-50 dBu /-40 dBu/
+4 dBu/AES/EBU

MIC input

XLR-5-pin type (Female),
-60 dBu/-50 dBu /-40 dBu
LPF 14 kHz: -8 dB

Test output

BNC (1), 1.0 Vp-p, 75 Ω , unbalanced

HD-SDI output

BNC (2), 0.8 Vp-p, unbalanced

Audio output

XLR-5-pin type (Male), 0 dBm

Time code output

BNC, 1.0 Vp-p, 75 Ω

Earphone

Mini-jack, 8 Ω , - ∞ to -18 dBs variable

DC input

XLR-4-pin type (Male), 11 to 17 V DC

DC output

11 to 17 V DC, Max. 100 mA

Lens

12-pin

Remote

8-pin

VTR section

Recording format

HDCAM

Tape speed

Approx. 77.4 mm/s (24P mode)

Playback/Recording time

40 min (59.94I, 29.97P), 48 min (50I,25P),
50 min (24P, 23.98P), with BCT-40HD

Fast forward/rewind time

5 min with BCT-40HD

Recommended tape

Sony BCT-6HD/12HD/22HD/32HD/40HD

Sampling frequency

Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization

12 bit/sample of input-output signals
(8 bit sample for internal compression process)

Error correction

Reed-Solomon code

Error concealment

Adaptive three dimensional

Audio performance

(playback with HDW-F500)

Frequency response

20 Hz to 20 kHz, +0.5 dB/-0.8 dB

Dynamic range

More than 85 dB (Emphasis ON)

Distortion

0.08 % Max.

Cross talk

-70 dB

Wow & flutter

Below measurable limit

Camera section

Pickup device

3-chip 2/3-type FIT CCD

Picture elements (H x V)

1920 x 1080

Optical system

F1.4 prism system

Built-in filters

A: 5600 K B: 3200 K C: 4300 K D: 6300 K

1: Clear 2: 1/4 ND 3: 1/16 ND 4: 1/64 ND

Shutter speed (1080/24P mode)

1/32, 1/48, 1/50, 1/60, 1/96, 1/125, 1/250,
1/500, 1/1000 (s)

Clear scan

(ECS) 24 to 7000 Hz (Minimum setting depends on frame rate selected)

Lens mount

Special bayonet mount

Sensitivity

f10.0 at 2000 lux, 89.9 % reflective,
At 24 fps, with a 1/48-second shutter speed (equivalent to a 180° film camera shutter setting), the exposure index is approximately equivalent to 300 ISO.

HDW-750P HDCAM Camcorder

Features

- Combines an HD colour video camera head with an HDCAM portable video cassette recorder
- Incorporates three 2/3-inch type Power HAD FIT CCD imagers each with 2,200,000 pixels that conform to 1920(H) x 1080(V) CIF (Common Image Format)
- 10-bit A/D converter and Advanced Digital Signal Processor (ADSP) for excellent picture quality
- Superb recording quality and high reliability of the HDCAM format in the VTR section
- Allows 25PsF and 50i recording at 1920 x 1080 pixel resolutions
- Provides excellent portability and a dust and drip-proof design for use in High Definition ENG, EFP and the other applications
- A new method of processing HD digital signals further improves image quality and simplifies setup operations
- Existing 2/3-inch type lens can be used
- Slot-in mechanism to accommodate an optional Wireless Microphone Receiver
- Picture cache function (optional) to avoid missing the start of an important shot
- Memory stick setup system can memorise and recall various parameter settings
- Electronic shutter includes ECS and S-EVS functions to provide motion blur-free images in any situation
- HD SDI output provided as standard
- Down converted SD-SDI or analogue composite out (option)
- Dual filter wheels for Neutral density and Colour temperature control
- A simple switch operation enables automatic adjustment of black set, black balance and white balance
- Various warning indicators
- New version 2 camcorder software increases latitude to give a more film-like dynamic transfer characteristic
- Remote REC start of HDW-S280/1 via HD-SDI (with version 2 software)



The HDW-750P can be supplied with an HDVF-C30W (2.7-inch HD Colour LCD Viewfinder), instead of the 2-inch Mono viewfinder. In this case, the model code is HDW-750PC

Supplied Accessories

HDVF-20A 2-inch Type HD B/W CRT Viewfinder (1)
 Stereo microphone (super cardioid directional, external power supply type) (1)
 Shoulder Strap (1)
 Lens mount securing rubber (1)
 Operation Manual (1)

Optional Accessories

HDVF-C750W Multi-format HD Colour LCD Viewfinder
 HDVF-C30W Multi-format HD Colour LCD Viewfinder
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BP-L60S Rechargeable Lithium Ion Battery Pack
 BP-L80S Rechargeable Lithium-ion Battery Pack
 AC-DN10 AC Adaptor/Charger
 AC-DN2B AC Adaptor
 RM-B750 Remote Control Unit
 HKDW-705 Slow Shutter Board
 BC-M150 Ni-MH & Li-ion Battery Charger
 BC-L500 Li-ion Battery Charger
 CAC-12 Microphone Holder for HDW-750PC
 HKDW-702/1 Down Converter Board
 HKDW-703/1 Picture Cache Board
 BKW-401 Viewfinder Rotation Bracket
 RM-B150 Remote Control Unit
 VCT-14 Tripod Adaptor
 LMD-9050 Colour LCD Monitor
 ECM-678 Shotgun Microphone
 WRT-847 UHF Handheld Transmitter
 WRR-855B UHF Synthesized Diversity Receiver
 WRT-8B UHF Synthesized Diversity Transmitter
 MSA-A "Memory Stick" IC Memory Media

Specifications

General

Power voltage:
12 +5.0/-1.0

Power consumption:
34 W (with 12 V DC supply, when recording without HDVF-20A)

Operating temperature:
0 °C to 40 °C (32 °F to 104 °F)

Operating humidity:
25% to 85% (relative humidity)

Storage temperature:
-20 °C to 60 °C (-4 °F to 140 °F)

Mass:
Approx. 5.3 kg (11 lb 14oz) (with viewfinder, cassette, and BP-GL95 Battery Pack)

Video Camera Section

Imager:
2/3-inch type FIT CCD with 2,200,000 pixels

Effective picture elements:
1920 (H) x 1080 (V)

Imager Configuration:
RGB 3-CCD

Spectral system:
F1.4 prism system (with quartz filter)

Built-in filters
CC filter:
A: Cross filter
B: 3200K
C: 4300K
D: 6300K
ND filter:
1: Clear
2: 1/4 ND
3: 1/16 ND
4: 1/64 ND

Lens mount:
Special bayonet type

Sensitivity:
F10 (Typical) 89.9% reflection chart, 2000 lx

Minimum Illumination:
Approx. 0.3 lx (F 1.4 lens, +42 dB turbo gain)

Smear Level:
-135 dB (typical)

S/N ratio:
54 dB (typical)

Modulation depth at 5 MHz:
45% \pm 5%

Horizontal resolution:
1000 TV lines

Shutter speed:
1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s) (at 50i format) 1/33, 1/50, 1/60, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s) (at 25PsF format)

ECS:
25.0 Hz to 4700 Hz (at 50i format), 25.0 to 2100 Hz (at 25PsF format)

Programmable Gain:
-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB (select in camera set up menu for L/M/H/TURBO)

VTR Section

Usable cassette tapes:
BCT-22HD/40HD 1/2-inch HDCAM cassette tapes

Tape speed:
Approx. 80.6 mm/s (at 50i/25PsF format)

Record/playback time:
Max. 48 min. with BCT-40HD

Fast forward time:
Approx. 5 minutes (using BCT-40HD video cassette)

Rewind time:
Approx. 5 minutes (using BCT-40HD video cassette)

Continuous recording time:
Approx. 90 minutes (using BP-L60A Battery Pack)

Digital video signal

Sampling frequency:
Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization:
10 bits/sample (8 bits/sample for compression processing)

Compression:
Coefficient recording system

Channel coding:
S-NRZI PR-IV

Error correction:
Reed-Solomon code

Error concealment:
Adaptive three dimensional

Audio (with standard playback machine)

Frequency response:
20 Hz to 20 kHz +0.5/-1.0 dB

Dynamic range:
85 dB min. (emphasis ON)

Distortion:
0.08% max

Cross talk:
-70 dB max

Wow and flutter
Below measurable limit

Input/output connectors

Signal inputs:
Audio IN CH-1/CH-2 (XLR, 3-pin, female):
-60 dBu/+4 dBu (0 dBu = 0.775 Vrms)

MIC IN (XLR, 5-pin, female):
-60 dBu

GENLOCK IN (BNC type):
1.0 Vp-p, 75 Ω

TC IN (BNC type):
0.5 V to 18 Vp-p, 10 k Ω

Signal outputs

TEST OUT (BNC type):
1.0 Vp-p, 75 Ω , unbalanced

VBS/SDI OUT (BNC type) (only when the HKDW-702/1 is installed):
75 Ω , unbalanced, VBS OUT: 1.0 Vp-p, SDI OUT: 0.8 Vp-p

HD SDI OUT (BNC type):
0.8 Vp-p, 75 Ω , unbalanced

AUDIO OUT (XLR, 5-pin, male):
0 dBm

TC OUT (BNC type):
1.0 Vp-p, 75 Ω

EARPHONE (minijack)
8 Ω , $-\infty$ to -18 dBs variable

Others

DC IN (XLR, 4-pin, male):
11 to 17 V DC

DC OUT (4-pin):
11 to 17 V DC, maximum current 0.1A

LENS (12-pin)

REMOTE (8-pin)

HDW-730S HDCAM Camcorder

The HDW-730S is an HDCAM camcorder that is offered at a price point comparable to high-end SD camcorders by specifically focusing on 1080/60i or 1080/50i acquisition. Equipped with a number of unique features to powerfully assist even the harshest shooting environments, plus the outstanding picture performance that all HDCAM camcorders provide, the HDW-730S is the ideal camcorder to support migration to the next generation of ENG, EFP, and general HD acquisition applications.

Features

- 2.2 million-pixel 2/3-inch type IT Power HAD CCD
- Ultimate Sensitivity (with the HKDW-705 Slow Shutter Board)
- Reduced risk of missing scenes (with the HKDW-703/1 Picture Cache Board)
- Long Recording Time
- Rugged and Ergonomic Design
- Versatile Monitoring Capability
- Shot Mark Handling
- Quick Setup
- Single Optical Filter Wheel
- New version 2 camcorder software increases latitude to give a more film-like dynamic transfer characteristic
- Remote REC start of HDW-S280/1 via HD-SDI (with version 2 software)



Supplied Accessories

HDVF-20A 2-inch Type HD B/W CRT Viewfinder (1)
 Shoulder Strap (1)
 Monaural microphone, Ultra directional (1)
 Lens mount securing rubber (1)
 Operation Manual (1)

Optional Accessories

HDVF-C30W Multi-format HD Colour LCD Viewfinder
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BP-L60S Rechargeable Lithium Ion Battery Pack
 BP-L80S Rechargeable Lithium-ion Battery Pack
 AC-DN2B AC Adaptor
 AC-DN10 AC Adaptor/Charger
 RM-B750 Remote Control Unit
 HKDW-705 Slow Shutter Board
 BC-M150 Ni-MH & Li-ion Battery Charger
 BC-L500 Li-ion Battery Charger
 HKDW-702/1 Down Converter Board
 HKDW-703/1 Picture Cache Board
 BKW-401 Viewfinder Rotation Bracket
 RM-B150 Remote Control Unit
 VCT-14 Tripod Adaptor
 WRR-855B UHF Synthesized Diversity Receiver
 WRT-8B UHF Synthesized Diversity Transmitter
 WRT-847 UHF Handheld Transmitter
 LMD-9050 Colour LCD Monitor
 MSA-A "Memory Stick" IC Memory Media
 LC-DN7 Carry Case
 ECM-678 Shotgun Microphone

Specifications

General

Mass:

Approx. 3.7 kg (8 lb 3 oz): Main Body,
Approx. 5.3 kg (11 lb 14 oz) (with MIC, VF,
BCT-40HD and BP-GL95)

Dimensions:

127 x 206 x 308 mm (5 x 8 1/8 x 12 1/4
inch)

Power requirements:

DC 12V + 5.0 V/-1.0 V

Power consumption:

33 W (with 12V power supply, REC mode,
without VF)

Operating temperature:

0 °C to +40 °C (32 °F to + 104 °F)

Storage temperature:

-20 °C to + 60 °C (-4 °F to + 140 °F)

Humidity:

25% to 85% (relative humidity)

Continuous operating time:

Approx. 135 min with BP-GL95

Input/Output connectors

Genlock video input:

BNC type x 1, 1.0 Vp-p, 75 Ω

Time code input:

BNC type x 1, 0.5 V to 18 Vp-p, 10 k Ω

Mic input:

XLR-3-pin type x 1 (Female), -60 dBu

Test output:

BNC type x 1, 1.0 Vp-p, 75 Ω , unbalanced

VBS/SDI output (option: HKDW-702/1):

BNC type x 1, 75 Ω

VBS out: 1.0 Vp-p

SDI out: 0.8 Vp-p

HD-SDI output:

BNC type (x 1), 0.8 Vp-p, 75 Ω ,
unbalanced

Audio output:

XLR-5-pin type x 1 (Male), 0 dBm

Time code output:

BNC type x 1, 1.0 Vp-p, 75 Ω

Earphone:

Mini Jack x 2, 8 Ω , $-\infty$ to -18 dBs variable

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR-4-pin type (Male), DC 11 V to 17 V

DC output

4-pin (for wireless microphone receiver),

DC 11 V to 17 V, maximum current 0.1 A

VTR section

Recording format:

HDCAM

Tape speed:

Approx. 96.7 mm/s (at 30 frames) (at
59.94i format)

Approx. 80.6 mm/s (at 25 frames) (at 50i
format)

Playback/Recording time:

Max. 40 min. with BCT-40HD (at 59.94i
format)

Max. 48 min. with BCT-40HD (at 50i
format)

Fast forward/rewind:

Approx. 5 min. with BCT-40HD

Recommended tape:

Approx. 5 min. with BCT-40HD

Digital video performance

Sampling frequency:

Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization:

10 bits/sample (8 bits/sample for
compression processing)

Channel coding:

S-NRZI PR-IV

Compression:

Coefficient recording system

Error correction:

Reed-Solomon code

Error concealment:

Adaptive three dimensional

Audio performance

Frequency response:

20 Hz to 20 kHz, + 0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB (emphasis ON)

Distortion (at 1 kHz, emphasis ON, reference level):

Less than 0.08%

Cross talk (at 1 kHz, reference level):

Less than -70 dB

Wow and flutter:

Below measurable limit

Camera section (Performance)

Pickup device:

3-chip 2/3-inch type IT CCD

Effective picture elements:

1920 (H) x 1080 (V)

Optical system:

F1.4 prism (Equipped with Quarz Filter)

Lens mount:

Special bayonet mount

Built-in filters:

1: Clear, 2: 5600K+1/8ND, 3: 5600K,

4: 5600K+1/64ND

Sensitivity (2000 lx, 89.9% reflectance):

F10.0 (typical) Equivalent to ISO 600 or
more

Minimum illumination:

Approx. 0.3 lx (F1.4 lens, +42 dB turbo
gain)

Smear level:

-125 dB

S/N ratio:

54 dB (typical)

Modulation depth at 5 MHz:

45% +/-5%

Horizontal resolution:

1000 TV lines

Shutter speed:

1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000

(s) (at 59.94i format)

1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000

(s) (at 50i format)

Clear Scan:

60 Hz to 4300 Hz (at 59.94i format)

Programmable Gain:

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42 dB

Viewfinder

CRT:

2.0-inch monochrome

Controls:

BRIGHT, CONTRAST, PEAKING controls

TALLY, ZEBRA, DISPLAY/ASPECT switches

Horizontal resolution:

500 TV lines (16:9, at center)

Microphone:

Ultra-directional monaural microphone
(Detachable)

HDW-2000 HDCAM VTR

Features

- Compact and affordable HD videocassette recorder
- High picture quality using HDCAM format
- Built-in down converter
- 1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 1080/25PsF, 1080/29.97PsF record and playback
- Long recording time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
- Versatile interfaces: HD SDI input/output, SDI output, analogue component output, analogue composite (NTSC/PAL) output, digital audio (AES/EBU) input/output, analogue audio input/output and audio monitor output (2-ch, analogue)
- Frame-accurate editing
- Pre-read editing
- High speed colour picture search
- Dynamic Tracking playback
- Digital jog sound
- Audio crossfade function
- Dynamic Motion Control (DMC) playback
- 1080/1035 line conversion
- Shot mark handling
- Selectable picture modes: Squeeze, letter box, and edge crop modes
- Dolby-E/Dolby AC-3 support
- Digital audio and ancillary-data recording
- Low power consumption of 220 W
- User-friendly control panel
- Easy maintenance



Supplied Accessories

Operation manual (1)
Installation manual (1)

Optional Accessories

HKDW-101 Remote Control Panel
HKDW-102 SDTI (HDCAM) Interface Board
BKMW-102 Remote Control Unit
BKMW-103 Control Panel Extension Kit
RMM-131 Rack Mount Kit
RCC-G Cables 9-pin/9-pin Cable
BCT-HD series HDCAM tapes
BCT-HD12CL Head cleaning videocassette
tapes for HDCAM VTRs

Specifications

General

Power requirements:

100 to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5 to +40 °C (+41 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

25 to 80% (relative humidity)

Mass:

23 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed:

96.7 mm/s (59.94 Hz), 80.6 mm/s (50 Hz)

Digital recording/playback time:

124 minutes (59.94 Hz, with

BCT-124HDLC)

149 minutes (50 Hz, with BCT-124HDLC)

40 minutes (59.94 Hz, with BCT-40HDC)

48 minutes (50 Hz, with BCT-40HDC)

Fast forward/rewind time:

Approx. 3 min with BCT-124HDL cassette

Search speed range

Shuttle mode:

Still to ± 50 times normal speed

playback

Variable mode:

-1 to +2 times normal speed playback

Jog mode:

Still to ± 1 times normal speed playback

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less (both L and S cassette)

Inputs/outputs

HD-SDI input:

BNC (1), Serial Digital 1.485 Gb/s, SMPTE

292M

Reference video input:

BNC (2) (with a loop-through), Tri-level

sync, 0.6 Vp-p, 75 Ω , sync negative or

black burst

Digital audio input (CH 1/2, 3/4):

BNC (2), AES/EBU

Analogue audio input (CH 1/2/3/4/Cue):

BNC (2) (with loop-through), AES/EBU

XLR 3-pin type, female (5)

Low off: -60 dBu, high impedance,

balanced

High off: +4 dBu, high impedance,

balanced

High on: +4 dBm, 600 Ω termination,

balanced

Time code input:

XLR 3-pin type, female, x1, 0.5 to 18 Vp-p,

10 k Ω , balanced

HD-SDI output:

BNC (3) (SMPTE 292M including one character out), Serial Digital (1.485 Gb/s)

SDI output:

BNC (3) (SMPTE 259M including one character out), Serial Digital (270 Mb/s)

Analogue composite output:

BNC (3) (RS-170A, including one character out, one WFM out)

Y: 1.0 Vp-p, sync negative, R-Y/B-Y: 0.7 Vp-p,

75 Ω

Analogue component output:

BNC (3), for 1 set, 1.0 Vp-p, 75 Ω , sync negative

Digital audio output (CH1/2, 3/4):

BNC (2), AES/EBU

Analogue audio output (CH1/2/3/4):

XLR 3-pin type (5), male, +4 dBm (600 Ω load), low impedance, balanced

Time code output:

XLR 3-pin type, male (1) (2.2 Vp-p, low impedance balanced)

Monitor output (L/R):

XLR 3-pin type, male (2) (+4 dBm at 600 Ω load, low impedance, balanced)

Headphones:

JM-60 stereo phone jack (∞ to -12 dBu at 8 Ω load, unbalanced)

Remote 1 input:

D-sub 9-pin, Sony 9-pin remote interface

Remote 1 output:

D-sub 9-pin, Sony 9-pin remote interface

RS-232C:

D-sub 9-pin

Remote 2 Parallel I/O:

D-sub 50-pin

Video control:

D-sub 9-pin, D-sub 15-pin

Control panel:

D-sub 10-pin, control panel I/O

Processor adjustment range

Video level:

 ± 3 dB/ ∞ to +3 dB, selectable

Chroma level:

 ± 3 dB/ ∞ to +3 dB, selectable

Set up/black level:

 ± 3 IRE

Chroma phase/hue:

 $\pm 30^\circ$

System sync phase:

 ± 15 μ s

System SC phase:

 ± 200 ns

Digital video performance

Sampling frequency:

Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantization:

10 bits/sample (compression 8 bits/sample)

Compression:

Coefficient recording system

Channel coding:

S-I-NRZI PR-IV

Error correction:

Reed-Solomon code

Analogue component output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

56 dB or more

K-factor (2T pulse):

1% or less

Analogue composite output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

53 dB or more

Differential gain:

2% or less

Differential phase:

2% or less

Y/C delay:

20 ns or less

K-factor (2T pulse):

1% or less

Output SCH phase:

Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Wow and flutter:

Below measurable level

Headrooms:

20 dB (or 18 dB selectable)

Emphasis (on/off selectable in REC mode):

T1 = 50 μ s, T2 = 15 μ s

Analogue audio output performance

A/D quantization:

20 bits/sample

D/A quantization:

20 bits/sample

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

(0 dB at 1 kHz)

Dynamic range:

More than 95 dB (at 1 kHz emphasis on)

Distortion:

Less than 0.05% (at 1 kHz, emphasis on, reference level)

Crosstalk:

Less than -80 dB (at 1 kHz, between any two channels)

Cue track

Sampling frequency:

100 Hz to 12 kHz ± 3 dB

S/N ratio:

More than 45 dB (at 3% distortion level)

Distortion:

Less than 2% (T.H.D at 1 kHz reference level)

Wow and flutter:

Less than 0.2% rms

Erase ratio:

More than 60 dB

HDW-D2000 HDCAM VTR

Features

- Compact and affordable HD videocassette recorder
- High picture quality using HDCAM format
- Legacy playback includes Digital Betacam and MPEG IMX tapes
- Built-in up and down converters
- 1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 1080/25PsF, 1080/29.97PsF record and playback
- Long recording time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
- Versatile interfaces: HD SDI input/output, SDI output, analogue component output, analogue composite (NTSC/PAL) output, digital audio (AES/EBU) input/output, analogue audio input/output and audio monitor output (2-ch, analogue)
- Frame-accurate editing
- Pre-read editing
- High speed colour picture search
- Dynamic Tracking playback
- Digital jog sound
- Audio crossfade function
- Dynamic Motion Control (DMC) playback
- 1080/1035 line conversion
- Shot mark handling
- Selectable picture modes: Squeeze, letter box, and edge crop modes
- Dolby-E/Dolby AC-3 support
- Digital audio and ancillary-data recording
- Low power consumption of 220 W
- User-friendly control panel
- Easy maintenance



Supplied Accessories

Operation manual (1)

Installation manual (1)

Optional Accessories

HKDW-101 Remote Control Panel

HKDW-102 SDTI (HDCAM) Interface Board

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

RMM-131 Rack Mount Kit

RCC-G Cables 9-pin/9-pin Cable

BCT-HD series HDCAM tapes

BCT-HD12CL Head cleaning videocassette
tapes for HDCAM VTRs

Specifications

General

Power requirements:

100 to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5 to +40 °C (+41 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to + 140 °F)

Humidity:

25 to 80% (relative humidity)

Mass:

23 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape Speed

HDCAM:

96.7 mm/s (59.94 Hz), 80.6 mm/s (50 Hz)

Digital Betacam:

96.7 mm/s

MPEG IMX:

64.5 mm/s (59.94 Hz), 53.8 mm/s (50 Hz)

Digital recording/playback time:

124 minutes (59.94 Hz, with BCT-124HDLC)

149 minutes (50 Hz, with BCT-124HDLC)

40 minutes (59.94 Hz, with BCT-40HDC)

48 minutes (50 Hz, with BCT-40HDC)

Fast forward/rewind time:

Approx. 3 min with BCT-124HDL cassette

Search speed range

Shuttle mode

HDCAM:

Still to ± 50 times normal speed
playback

Digital Betacam:

Still to ± 50 times normal speed
playback

MPEG IMX:

Still to ± 78 times normal speed
playback

Variable mode

HDCAM:

-1 to +2 times normal speed playback

Digital Betacam:

-1 to +3 times normal speed playback

MPEG IMX:

-1 to +3 times normal speed playback

Jog mode:

Still to ± 1 times normal speed playback

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less (both L and S cassette)

Inputs/outputs

HD-SDI input:

BNC (1), Serial Digital 1.485 Gb/s, SMPTE
292M

Reference video input:

BNC (2), (with a loop-through), Tri-level sync,
0.6 Vp-p, 75 Ω , sync negative or black burst
Digital audio input (CH 1/2, 3/4):

BNC (2), AES/EBU

Analogue audio input (CH 1/2/3/4/Cue):

BNC (2) (with loop-through), AES/EBU
XLR 3-pin type, female (5)

Low off: -60 dBu, high impedance, balanced

High off: +4 dBu, high impedance, balanced

High on: +4 dBm, 600 Ω termination,
balanced

Time code input:

XLR 3-pin type, female (1), 0.5 to 18 Vp-p,
10 k Ω , balanced

HD-SDI output:

BNC (3) (SMPTE 292M including one
character out), Serial Digital (1.485 Gb/s)

SDI output:

BNC (3) (SMPTE 259M including one
character out), Serial Digital (270 Mb/s)

Analogue composite output:

BNC (3) (RS-170A, including one character
out, one WFM out)Y: 1.0 Vp-p, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

Analogue component output:

BNC (3, for 1 set), 1.0 Vp-p, 75 Ω , sync
negative

Digital audio output (CH1/2, 3/4):

BNC (2), AES/EBU

Analogue audio output (CH1/2/3/4):

XLR 3-pin type (5), male, +4 dBm (600 Ω
load), low impedance, balanced

Time code output:

XLR 3-pin type, male (1) (2.2 Vp-p, low
impedance balanced)

Monitor output (L/R):

XLR 3-pin type, male (2) (+4 dBm at 600 Ω
load, low impedance, balanced)

Headphones:

JM-60 stereo phone jack ($-\infty$ to -12 dBu at
8 Ω load, unbalanced)

Remote 1 input:

D-sub 9-pin, Sony 9-pin remote interface

Remote 1 output:

D-sub 9-pin, Sony 9-pin remote interface

RS-232C:

D-sub 9-pin

Remote 2 Parallel I/O:

D-sub 50-pin

Video control:

D-sub 9-pin, D-sub 15-pin

Control panel:

D-sub 10-pin, control panel I/O

Processor adjustment range

Video level:

 ± 3 dB/ ∞ to +3 dB, selectable

Chroma level:

 ± 3 dB/ ∞ to +3 dB, selectable

Set up/black level:

 ± 3 IRE

Chroma phase/hue:

 $\pm 30^\circ$

System sync phase:

 ± 15 μ s

System SC phase:

 ± 200 ns

Y/C delay:

 ± 100 ns

Digital video performance

Sampling frequency:

Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantization:

10 bits/sample (compression 8 bits/sample)

Compression:

Coefficient recording system

Channel coding:

S-I-NRZI PR-IV

Error correction:

Reed-Solomon code

Analogue component output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

56 dB or more

K-factor (2T pulse):

1% or less

Analogue composite output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

53 dB or more

Differential gain:

2% or less

Differential phase:

2% or less

Y/C delay:

20 ns or less

K-factor (2T pulse):

1% or less

Output SCH phase:

Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Wow and flutter:

Below measurable level

Headrooms:

20 dB (or 18 dB selectable)

Emphasis (on/off selectable in REC mode):

T1 = 50 μ s, T2 = 15 μ s

Analogue audio output performance

A/D quantization:

20 bits/sample

D/A quantization:

20 bits/sample

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB
(0 dB at 1 kHz)

Dynamic range:

More than 95 dB (at 1 kHz emphasis on)

Distortion:

Less than 0.05% (at 1 kHz, emphasis on,
reference level)

Crosstalk:

Less than -80 dB (at 1 kHz, between any two
channels)

Cue track

Sampling frequency:

100 Hz to 12 kHz ± 3 dB

S/N ratio:

More than 45 dB (at 3% distortion level)

Distortion:

Less than 2% (T.H.D at 1 kHz reference
level)

Wow and flutter:

Less than 0.2% rms

Erase ratio:

More than 60 dB

HDW-M2000P HDCAM VTR

Features

- Compact and affordable HD videocassette recorder
- High picture quality using HDCAM format
- Legacy playback includes Digital Betacam, MPEG IMX, Betacam SX, Betacam SP and Betacam tapes
- Built-in up and down converters
- 1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 1080/25PsF, 1080/29.97PsF record and playback
- Long recording time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
- Versatile interfaces: HD SDI input/output, SDI output, analogue component output, analogue composite (NTSC/PAL) output, digital audio (AES/EBU) input/output, analogue audio input/output and audio monitor output (2-ch, analogue)
- Frame-accurate editing
- Pre-read editing
- High speed colour picture search
- Dynamic Tracking playback
- Digital jog sound
- Audio crossfade function
- Dynamic Motion Control (DMC) playback
- 1080/1035 line conversion
- Shot mark handling
- Selectable picture modes: Squeeze, letter box, and edge crop modes
- Dolby-E/Dolby AC-3 support
- Digital audio and ancillary-data recording
- Low power consumption of 220 W
- User-friendly control panel
- Easy maintenance



Supplied Accessories

Operation manual (1)

Installation manual (1)

Optional Accessories

HKDW-101 Remote Control Panel

HKDW-102 SDTI (HDCAM) Interface Board

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

RMM-131 Rack Mount Kit

RCC-G Cables 9-pin/9-pin Cable

BCT-HD series HDCAM tapes

BCT-HD12CL Head cleaning videocassette
tapes for HDCAM VTRs

Specifications

General

Power requirements:
100 to 240 V, 50/60 Hz

Power consumption:
220 W

Operating temperature:
+5 to +40 °C (+41 to +104 °F)

Storage temperature:
-20 to +60 °C (-4 to + 140 °F)

Humidity:
25 to 80% (relative humidity)

Mass:
23 kg (50 lb 11 oz)

Dimensions:
427 (W) x 174 (H) x 544 (D) mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape Speed

HDCAM:
96.7 mm/s (59.94 Hz), 80.6 mm/s (50 Hz)

Digital Betacam:
96.7 mm/s

MPEG IMX:
64.5 mm/s (59.94 Hz), 53.8 mm/s (50 Hz)

Betacam SX:
59.6 mm/s

Betacam SP/Betacam:
118.6 mm/s (59.94 Hz), 101.5 mm (50 Hz)

Digital recording/playback time:
124 minutes (59.94 Hz, with BCT-124HDLC)
149 minutes (50 Hz, with BCT-124HDLC)
40 minutes (59.94 Hz, with BCT-40HDC)
48 minutes (50 Hz, with BCT-40HDC)

Fast forward/rewind time:
Approx. 3 min with BCT-124HDL cassette

Search speed range

Shuttle mode

HDCAM:
Still to ± 50 times normal speed playback

Digital Betacam:
Still to ± 50 times normal speed playback

MPEG IMX:
Still to ± 78 times normal speed playback

Betacam SX:
Still to ± 78 times normal speed playback

Betacam SP/Betacam:
Still to ± 35 times normal speed playback (59.94 Hz)
Still to ± 42 times normal speed playback (50 Hz)

Variable mode

HDCAM:
-1 to +2 times normal speed playback

Digital Betacam:
-1 to +3 times normal speed playback

MPEG IMX:
-1 to +3 times normal speed playback

Betacam SX:
-1 to +2 times normal speed playback

Betacam SP/Betacam:
-1 to +3 times normal speed playback

Jog mode:
Still to ± 1 times normal speed playback

Servo lock time:
0.5 s or less (from standby on)

Load/unload time:
6 s or less (both L and S cassette)

Inputs/outputs

HD-SDI input:
BNC (1), Serial Digital 1.485 Gb/s, SMPTE 292M

Reference video input:
BNC (2), (with a loop-through), Tri-level sync, 0.6 Vp-p, 75 Ω , sync negative or black burst

Digital audio input (CH 1/2, 3/4):
BNC (2), AES/EBU

Analogue audio input (CH 1/2/3/4/Cue):
BNC (2)(with loop-through), AES/EBU
XLR 3-pin type, female (5)
Low off: -60 dBU, high impedance, balanced
High off: +4 dBU, high impedance, balanced
High on: +4 dBm, 600 Ω termination, balanced

Time code input:
XLR 3-pin type, female (1), 0.5 to 18 Vp-p, 10 k Ω , balanced

HD-SDI output:
BNC (3) (SMPTE 292M including one character out), Serial Digital (1.485 Gb/s)

SDI output:
BNC (3) (SMPTE 259M including one character out), Serial Digital (270 Mb/s)

Analogue composite output:
BNC (3) (RS-170A, including one character out, one WFM out)
Y: 1.0 Vp-p, sync negative,
R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analogue component output:
BNC (3, for 1 set) 1.0 Vp-p, 75 Ω , sync negative

Digital audio output (CH1/2, 3/4):
BNC (2), AES/EBU

Analogue audio output (CH1/2/3/4):
XLR 3-pin type, (5), male, +4 dBm (600 Ω load), low impedance, balanced

Time code output:
XLR 3-pin type, male (1) (2.2 Vp-p, low impedance balanced)

Monitor output (L/R):
XLR 3-pin type, male, (2) (+4 dBm at 600 Ω load, low impedance, balanced)

Headphones:
JM-60 stereo phone jack ($-\infty$ to -12 dBU at 8 Ω load, unbalanced)

Remote 1 input:
D-sub 9-pin, Sony 9-pin remote interface

Remote 1 output:
D-sub 9-pin, Sony 9-pin remote interface

RS-232C:
D-sub 9-pin

Remote 2 Parallel I/O:
D-sub 50-pin

Video control:
D-sub 9-pin, D-sub 15-pin

Control panel:
D-sub 10-pin, control panel I/O

Processor adjustment range

Video level:
 ± 3 dB/ ∞ to +3 dB, selectable

Chroma level:
 ± 3 dB/ ∞ to +3 dB, selectable

Set up/black level:
 ± 3 IRE

Chroma phase/hue:
 $\pm 30^\circ$

System sync phase:
 ± 15 μ s

System SC phase:
 ± 200 ns

Y/C delay:
 ± 100 ns

Digital video performance

Sampling frequency:
Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantization:
10 bits/sample (compression 8 bits/sample)

Compression:
Coefficient recording system

Channel coding:
S-I-NRZI PR-IV

Error correction:
Reed-Solomon code

Analogue component output performance

Bandwidth:
Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,
R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:
56 dB or more

K-factor (2T pulse):
1% or less

Analogue composite output performance

Bandwidth:
Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,
R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:
53 dB or more

Differential gain:
2% or less

Differential phase:
2% or less

Y/C delay:
20 ns or less

K-factor (2T pulse):
1% or less

Output SCH phase:
Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
20 bits/sample

Wow and flutter:
Below measurable level

Headrooms:
20 dB (or 18 dB selectable)

Emphasis (on/off selectable in REC mode):
T1 = 50 μ s, T2 = 15 μ s

Analogue audio output performance

A/D quantization:
20 bits/sample

D/A quantization:
20 bits/sample

Frequency response:
20 Hz to 20 kHz, +0.5 dB/-1.0 dB (0 dB at 1 kHz)

Dynamic range:
More than 95 dB (at 1 kHz emphasis on)

Distortion:
Less than 0.05% (at 1 kHz, emphasis on, reference level)

Crosstalk:
Less than -80 dB (at 1 kHz, between any two channels)

Cue track

Sampling frequency:
100 Hz to 12 kHz ± 3 dB

S/N ratio:
More than 45 dB (at 3% distortion level)

Distortion:
Less than 2% (T.H.D at 1 kHz reference level)

Wow and flutter:
Less than 0.2% rms

Erase ratio:
More than 60 dB

HDW-M2100P HDCAM Player

Features

- Compact and affordable HD videocassette player
- High picture quality using HDCAM format
- Legacy playback includes Digital Betacam, MPEG IMX, Betacam SX, Betacam SP and Betacam tapes
- Built-in up and down converters
- 1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 1080/25PsF, 1080/29.97PsF playback
- Long playback time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
- Versatile interfaces: HD SDI, SDI, analogue component, analogue composite (NTSC/PAL), digital audio (AES/EBU), analogue audio, and audio monitor (2-ch, analogue) outputs
- High speed colour picture search
- Dynamic Tracking playback
- Digital jog sound
- Dynamic Motion Control (DMC) playback
- 1080/1035 line conversion
- Shot mark handling
- Selectable picture modes: Squeeze, letter box, and edge crop modes
- Dolby-E/Dolby AC-3 support
- Low power consumption of 220 W
- User-friendly control panel
- Easy maintenance



Supplied Accessories

Operation manual (1)

Installation manual (1)

Optional Accessories

HKDW-101 Remote Control Panel

HKDW-102 SDTI (HDCAM) Interface Board

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

RMM-131 Rack Mount Kit

RCC-G Cables 9-pin/9-pin Cable

BCT-HD series HDCAM tapes

BCT-HD12CL Head cleaning videocassette

tapes for HDCAM VTRs

Specifications

General

Power requirements:

100 to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5 to +40 °C (+41 to +104 °F)

Storage temperature:

-20 to +60 °C (-4 to +140 °F)

Humidity:

25 to 80% (relative humidity)

Mass:

23 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

HDCAM:

96.7 mm/s (59.94 Hz), 80.6 mm/s (50 Hz)

Digital Betacam:

96.7 mm/s

MPEG IMX:

64.5 mm/s (59.94 Hz), 53.8 mm/s (50 Hz)

Betacam SX:

59.6 mm/s

Betacam SP/Betacam:

118.6 mm/s (59.94 Hz), 101.5 mm (50 Hz)

Digital playback time:

124 minutes (59.94 Hz, with

BCT-124HDLC)

149 minutes (50 Hz, with BCT-124HDLC)

40 minutes (59.94 Hz, with BCT-40HDC)

48 minutes (50 Hz, with BCT-40HDC)

Fast forward/rewind time:

Approx. 3 min with BCT-124HDL cassette

Search speed range

Shuttle mode

HDCAM:

Still to ± 50 times normal speed playback

Digital Betacam:

Still to ± 50 times normal speed playback

MPEG IMX:

Still to ± 78 times normal speed playback

Betacam SX:

Still to ± 78 times normal speed playback

Betacam SP/Betacam:

Still to ± 35 times normal speed playback (59.94 Hz)

Still to ± 42 times normal speed playback (50 Hz)

Variable mode

HDCAM:

-1 to +2 times normal speed playback

Digital Betacam:

-1 to +3 times normal speed playback

MPEG IMX:

-1 to +3 times normal speed playback

Betacam SX:

-1 to +2 times normal speed playback

Betacam SP/Betacam:

-1 to +3 times normal speed playback

Jog mode:

Still to ± 1 times normal speed playback

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less (both L and S cassette)

Inputs/outputs

Time code input:

XLR 3-pin type, female (1), 0.5 to 18 Vp-p,

10 k Ω , balanced

HD-SDI output:

BNC (3) (SMPTE 292M including one

character out), Serial Digital (1.485 Gb/s)

SDI output:

BNC (3) (SMPTE 259M including one

character out), Serial Digital (270 Mb/s)

Analogue composite output:

BNC (3) (RS-170A, including one character out, one WFM out)

Y: 1.0 Vp-p, sync negative, R-Y/B-Y: 0.7

Vp-p, 75 Ω

Analogue component output:

BNC (3, for 1 set), 1.0 Vp-p, 75 Ω , sync negative

Digital audio output (CH1/2, 3/4):

BNC (2), AES/EBU

Analogue audio output (CH1/2/3/4):

XLR 3-pin type (5), male, +4 dBm (600 Ω load), low impedance, balanced

Time code output:

XLR 3-pin type, male (1) (2.2 Vp-p, low impedance balanced)

Monitor output (L/R):

XLR 3-pin type, male (2) (+4 dBm at 600 Ω load, low impedance, balanced)

Headphones:

JM-60 stereo phone jack ($-\infty$ to -12 dBu at 8 Ω load, unbalanced)

Remote 1 input:

D-sub 9-pin, Sony 9-pin remote interface

Remote 1 output:

D-sub 9-pin, Sony 9-pin remote interface

RS-232C:

D-sub 9-pin

Remote 2 Parallel I/O:

D-sub 50-pin

Video control:

D-sub 9-pin, D-sub 15-pin

Control panel:

D-sub 10-pin, control panel I/O

Processor adjustment range

Video level:

± 3 dB/ ∞ to +3 dB, selectable

Chroma level:

± 3 dB/ ∞ to +3 dB, selectable

Set up/black level:

± 3 IRE

Chroma phase/hue:

$\pm 30^\circ$

System sync phase:

± 15 μ s

System SC phase:

± 200 ns

Y/C delay:

± 100 ns

Digital video performance

Sampling frequency:

Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantization:

10 bits/sample (compression 8 bits/sample)

Compression:

Coefficient recording system

Channel coding:

S-I-NRZI PR-IV

Error correction:

Reed-Solomon code

Analogue component output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

56 dB or more

K-factor (2T pulse):

1% or less

Analogue composite output performance

Bandwidth:

Y: 0 to 5.75 MHz +0.5 dB/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5 dB/-2.0 dB

S/N ratio:

53 dB or more

Differential gain:

2% or less

Differential phase:

2% or less

Y/C delay:

20 ns or less

K-factor (2T pulse):

1% or less

Output SCH phase:

Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Wow and flutter:

Below measurable level

Headrooms:

20 dB (or 18 dB selectable)

Emphasis (on/off selectable in REC mode):

T1 = 50 μ s, T2 = 15 μ s

Analogue audio output performance

A/D quantization:

20 bits/sample

D/A quantization:

20 bits/sample

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

(0 dB at 1 kHz)

Dynamic range:

More than 95 dB (at 1 kHz emphasis on)

Distortion:

Less than 0.05% (at 1 kHz, emphasis on, reference level)

Crosstalk:

Less than -80 dB (at 1 kHz, between any two channels)

Cue track

Sampling frequency:

100 Hz to 12 kHz ± 3 dB

S/N ratio:

More than 45 dB (at 3% distortion level)

Distortion:

Less than 2% (T.H.D at 1 kHz reference level)

Wow and flutter:

Less than 0.2% rms

HDW-1800 HDCAM VTR

Features

- Most affordable HDCAM studio recorder •HDCAM record and replay •Built-in down converters •1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 1080/25PsF, 1080/29.97PsF record and playback •720/50P output when replaying 1080/25PsF or 1080/50i recordings^{*1}
- Input of HDV data via i.LINK^{*2} •Long playback time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette •Versatile interfaces: HD SDI, SDI, analogue composite (NTSC/PAL), digital audio (AES/EBU) •2-ch analogue audio inputs and outputs
- Audio monitor (2-ch, analogue) outputs •High speed colour picture search •Dynamic Tracking playback •Digital jog sound •Dynamic Motion Control (DMC) playback •Shot mark handling •Selectable picture modes: Squeeze, letter box, and edge crop modes
- Dolby-E/Dolby AC-3 support •Low power consumption of 150 W •User-friendly control panel •Easy maintenance

^{*1} Requires HKDW-104 option

^{*2} Requires HKDW-105 option

Supplied Accessories

Operation manual (1)

Installation manual (1)

Optional Accessories

RMM-131 Rack Mount Kit

HKDW-104 Pull-down/720P Board

HKDW-105 i.LINK (HDV) Input Board

RM-280 Editing Controller*

RMM-131 Rack Mount Kit

RCC-G Cables 9-pin/9-pin Cable

BCT-HD tapes BCT-HD series HDCAM tapes

BCT-HD12CL Head cleaning videocassette
tapes for HDCAM VTRs

* Supplied with a 9-pin to 4-pin remote cable (2 metres) for connection to the HDW-1800. For longer cable runs, a 10-metre cable is available as an option (1-832-104-11.)



Specifications

General

Power requirements

100 to 240 V, 50/60 Hz

Power consumption

150 W

Operating temperature

+5 to +40 °C (41 to 104 °F)

Storage temperature

-20 to +60 °C (-4 to +140 °F)

Humidity

20 to 90%

Mass

22 kg (48 lb 8 oz)

Dimensions (W x H x D)

427 x 174 x 544 mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

HDCAM

96.7 mm/s (59.94i, 29.97PsF),
80.6 mm/s (50i, 25PsF),
77.4 mm/s (24PsF, 23.98PsF)

HDCAM record/playback time

124 minutes (59.94i, 29.97PsF,
with BCT-124HDL cassette)
149 minutes (50i, 25PsF,
with BCT-124HDL cassette)
155 minutes (24PsF, 23.98PsF,
with BCT-124HDL cassette)
40 minutes (59.94i, 29.97PsF,
with BCT-40HD cassette)
48 minutes (50i, 25PsF,
with BCT-40HD cassette)
50 minutes (24PsF, 23.98PsF,
with BCT-40HD cassette)

Fast forward/rewind time

Approx. 3 minutes
(with BCT-124HDL cassette)

Search speed range

Shuttle mode

HDCAM

Still to ± 50 times normal speed
playback (59.94i, 29.97PsF),
Still to ± 58 times normal speed
playback (50i, 25PsF),
Still to ± 60 times normal speed
playback (24PsF, 23.98PsF)

Variable mode

HDCAM

-1 to +2 times normal speed playback

Jog mode

Still to ± 1 times normal speed playback

Servo lock time

0.6 s or less (59.94i, 29.97PsF,
from standby on), 0.7 s or less
(50i, 25PsF, 24PsF, 23.98PsF,
from standby on)

Load/unload time

6 s or less (both L and S cassettes)

Input/Output

HD-SDI input

BNC x 1 (SMPTE 292M),
Serial Digital (1.485 Gb/s)

Reference video input

BNC x 2 (with a loop-through),
0.3 Vp-p, 75 Ω ,
75 Ω , sync negative or Black Burst
or Composite

Digital audio input (CH 1/2, CH 3/4)

BNC x 2, AES/EBU

Analogue audio input (CH 1/2)

XLR-3-pin type, female, x 2

Low off:

-60 dBu, high impedance, balanced

High off:

+4 dBu, high impedance, balanced

High on:

-4 dBm, 600 Ω termination, balanced

Time code input

XLR-3-pin type, female, x 1
(0.5 to 18 Vp-p, 10 k Ω , balanced)

i.LINK(HDV 1080i) input (option: HKDW-105)

IEEE1394, 6-pin x 1

HD-SDI output

BNC x 3 (SMPTE 292M including one
character out), Serial Digital (1.485 Gb/s)

SD-SDI output

BNC x 3 (SMPTE 259M including one
character out), Serial Digital (270 Mb/s)

Analogue composite output

BNC x 3 (RS-170A, including one
character out, one WFM out), Y: 1.0 Vp-p,
sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Digital audio output

BNC x 2, AES/EBU, (CH 1/2, CH 3/4)

Analogue audio output (CH1/2)

XLR-3-pin type, x2, male,
+4 dBm (600 Ω load),
low impedance, balanced

Time code output

XLR-3-pin type, male, x 1
(2.2 Vp-p, low impedance, balanced)

Monitor output L/R

XLR-3-pin type, male, x 2
(+4 dBm at 600 Ω load,
low impedance, balanced)

Headphones

JM-60 Stereo phone jack
(∞ to -12 dBu at 8 Ω load, unbalanced)

Remote1 In

D-sub 9-pin, Sony 9-pin remote interface

Remote1 Out

D-sub 9-pin, Sony 9-pin remote interface

RS-232C

D-sub 9-pin

Remote2 Parallel I/O

D-sub 50-pin

Video control

D-sub 9-pin

Control panel

D-sub 15-pin

Others

*Memory Stick™ slot

Processor adjustment range

Video level

± 3 dB/ ∞ , to +3 dB, selectable

Chroma level

± 3 dB/ ∞ to +3 dB, selectable

Chroma phase/hue

$\pm 30^\circ$

System sync phase

± 15 μ s

System SC phase

± 200 ns

Digital video performance

Sampling frequency

Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantisation

10 bit/sample (compression: 8 bit/sample)

Compression

Coefficient recording system

Channel coding

S-I-NRZI PR-IV

Error correction

Reed-Solomon code

Analogue composite output performance

Bandwidth

0 to 5.75 MHz +0.5 dB/-3.0 dB

S/N ratio

53 dB or more

Differential gain

2% or less

Differential phase

2% or less

Y/C delay

20 ns or less

K Factor (2T Pulse)

1% or less

Output SCH phase

Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency

48 kHz (Synchronised with video)

Quantisation

20 bit/sample

Wow & flutter

Below measurable level

Headrooms

20 dB (or 18 dB selectable)

Emphasis (ON/OFF selectable in REC mode)

T1=50 μ s, T2=15 μ s (on/off selectable in
recording mode)

Analogue audio output performance

A/D quantisation

20 bit/sample

D/A quantisation

20 bit/sample

Frequency response

20 Hz to 20 kHz +0.5 dB/-1.0 dB
(0 dB at 1 kHz)

Dynamic range

More than 95 dB (at 1 kHz, emphasis ON)

Distortion

Less than 0.05%

(at 1 kHz, emphasis ON, reference level)

Crosstalk

Less than -80 dB

(at 1 kHz, between any two channels)

Cue track

Sampling frequency

100 Hz to 12 kHz ± 3 dB

S/N ratio

More than 45 dB (at 3% distortion level)

Distortion

Less than 2% (THD at 1 kHz,
reference level)

Wow & flutter

Less than 0.2% rms

HDW-D1800 HDCAM VTR

Features

- Affordable HD videocassette recorder •High picture quality using HDCAM format •Legacy playback of Digital Betacam and MPEG IMX tapes •Built-in up and down converters •1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 1080/25PsF, 1080/29.97PsF recording and playback •720/50P output when replaying 1080/25PsF or 1080/50i recordings^{*1} •Input of HDV data via i.LINK^{*2}
- Long playback time of up to 124 minutes at 1080/59.94i or 149 minutes at 1080/50i on an L-size cassette
- Versatile interfaces: HD SDI, SDI, analogue component, analogue composite (NTSC/PAL), digital audio (AES/EBU) •2-ch analogue audio inputs and outputs
- Audio monitor (2-ch, analogue) outputs •High speed colour picture search •Dynamic Tracking playback •Digital jog sound •Dynamic Motion Control (DMC) playback
- Shot mark handling •Selectable picture modes: Squeeze, letter box, and edge crop modes
- Dolby-E/Dolby AC-3 support •Low power consumption of 150 W •User-friendly control panel •Easy maintenance

^{*1} Requires HKDW-104 option

^{*2} Requires HKDW-105 option

Supplied Accessories

Operation manual (1)

Installation manual (1)

Optional Accessories

RMM-131 Rack Mount Kit

HKDW-104 Pull-down/720P Board

HKDW-105 i.LINK (HDV) Input Board

RM-280 Editing Controller^{*2}

RMM-131 Rack Mount Kit

RCC-G Cables 9-pin/9-pin Cable

BCT-HD tapes BCT-HD series HDCAM tapes

BCT-HD12CL Head cleaning videocassette tapes for HDCAM VTRs

* Supplied with a 9-pin to 4-pin remote cable (2 metres) for connection to the HDW-D1800. For longer cable runs, a 10-metre cable is available as an option (1-832-104-11.)



Specifications

General

Power requirements

100 to 240 V, 50/60 Hz

Power consumption

150 W

Operating temperature

+5 to +40 °C (41 to 104 °F)

Storage temperature

-20 to +60 °C (-4 to +140 °F)

Humidity

20 to 90%

Mass

22 kg (48 lb 8 oz)

Dimensions (W x H x D)

427 x 174 x 544 mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

HDCAM

96.7 mm/s (59.94i, 29.97PsF),
80.6 mm/s (50i, 25PsF), 77.4 mm/s
(24PsF, 23.98PsF)

Digital BETACAM

96.7 mm/s

MPEG IMX

64.5 mm/s (525/59.94i),
53.8 mm (625/50i)

HDCAM record/playback time

124 minutes (59.94i, 29.97PsF,
with BCT-124HDL cassette)

149 minutes (50i, 25PsF,
with BCT-124HDL cassette)

155 minutes (24PsF, 23.98PsF,
with BCT-124HDL cassette)

40 minutes (59.94i, 29.97PsF,
with BCT-40HD cassette)

48 minutes (50i, 25PsF,
with BCT-40HD cassette)

50 minutes (24PsF, 23.98PsF,
with BCT-40HD cassette)

Fast forward/rewind time

Approx. 3 minutes

(with BCT-124HDL cassette)

Search speed range

Shuttle mode

HDCAM

Still to ± 50 times normal speed
playback (59.94i, 29.97PsF),
Still to ± 58 times normal speed
playback (50i, 25PsF),
Still to ± 60 times normal speed
playback (24PsF, 23.98PsF)

Digital BETACAM

Still to ± 50 times
normal speed playback

MPEG IMX

Still to ± 78 times
normal speed playback

Variable mode

HDCAM

-1 to +2 times normal speed playback

Digital BETACAM

-1 to +3 times
normal speed playback

MPEG IMX

-1 to +3 times
normal speed playback

Jog mode

Still to ± 1 times normal speed playback

Servo lock time

0.6 s or less (59.94i, 29.97PsF,
from standby on), 0.7 s or less
(50i, 25PsF, 24PsF, 23.98PsF,

from standby on)

Load/unload time

6 s or less (both L and S cassettes)

Input/output

HD-SDI input

BNC x 1 (SMPTE 292M),
Serial Digital (1.485 Gb/s)

Reference video input

BNC x 2 (with a loop-through),

0.3 Vp-p, 75 Ω ,

75 Ω , sync negative or Black Burst
or Composite

Digital audio input (CH 1/2, CH 3/4)

BNC x 2, AES/EBU

Analogue audio input (CH 1/2)

XLR-3-pin type, female, x 2

Low off:

-60 dBu, high impedance, balanced

High off:

+4 dBu, high impedance, balanced

High on:

-4 dBm, 600 Ω termination, balanced

Time code input

XLR-3-pin type, female, x 1

(0.5 to 18 Vp-p, 10 k Ω , balanced)

i.LINK(HDV 1080i) input (option: HKDW-105)

IEEE1394, 6-pin x 1

HD-SDI output

BNC x 3 (SMPTE 292M including one
character out), Serial Digital (1.485 Gb/s)

SD-SDI output

BNC x 3 (SMPTE 259M including one
character out), Serial Digital (270 Mb/s)

Analogue composite output

BNC x 3 (RS-170A, including one
character out, one WFM out), Y: 1.0 Vp-p,
sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Digital audio output

BNC x 4, AES/EBU
(CH 1/2, CH 3/4, CH 5/6, CH 7/8)

Analogue audio output (CH 1/2)

XLR-3-pin type, x 2, male,

+4 dBm (600 Ω load),

low impedance, balanced

Time code output

XLR-3-pin type, male, x 1

(2.2 Vp-p, low impedance, balanced)

Monitor output L/R

XLR-3-pin type, male, x 2

(+4 dBm at 600 Ω load,

low impedance, balanced)

Headphones

JM-60 Stereo phone jack

($-\infty$ to -12 dBu at 8 Ω load, unbalanced)

Remote1 In

D-sub 9-pin, Sony 9-pin remote interface

Remote1 Out

D-sub 9-pin, Sony 9-pin remote interface

RS-232C

D-sub 9-pin

Remote2 Parallel I/O

D-sub 50-pin

Video control

D-sub 9-pin

Control panel

D-sub 15-pin

Others

*Memory Stick™ slot

Processor adjustment range

Video level

± 3 dB/ ∞ to +3 dB, selectable

Chroma level

± 3 dB/ ∞ to +3 dB, selectable

Chroma phase/hue

$\pm 30^\circ$

System sync phase

$\pm 15 \mu$ s

System SC phase

± 200 ns

Digital video performance

Sampling frequency

Y: 74.25 MHz, R-Y/B-Y: 37.125 MHz

Quantisation

10 bit/sample (compression: 8 bit/sample)

Compression

Coefficient recording system

Channel coding

S-I-NRZI PR-IV

Error correction

Reed-Solomon code

Analogue composite output performance

Bandwidth

0 to 5.75 MHz +0.5 dB/-3.0 dB

S/N ratio

53 dB or more

Differential gain

2% or less

Differential phase

2% or less

Y/C delay

20 ns or less

K Factor (2T Pulse)

1% or less

Output SCH phase

Based upon RS-170A/CCIR R.624-3

Digital audio performance

Sampling frequency

48 kHz (Synchronised with video)

Quantisation

20 bit/sample

Wow & flutter

Below measurable level

Headrooms

20 dB (or 18 dB selectable)

Emphasis (ON/OFF selectable in REC mode)

T1=50 μ s, T2=15 μ s (on/off selectable in
recording mode)

Analogue audio output performance

A/D quantisation

20 bit/sample

D/A quantisation

20 bit/sample

Frequency response

20 Hz to 20 kHz +0.5 dB/-1.0 dB
(0 dB at 1 kHz)

Dynamic range

More than 95 dB
(at 1 kHz, emphasis ON)

Distortion

Less than 0.05%
(at 1 kHz, emphasis ON, reference level)

Crosstalk

Less than -80 dB
(at 1 kHz, between any two channels)

Cue track

Sampling frequency

100 Hz to 12 kHz ± 3 dB

S/N ratio

More than 45 dB (at 3% distortion level)

Distortion

Less than 2% (THD at 1 kHz,
reference level)

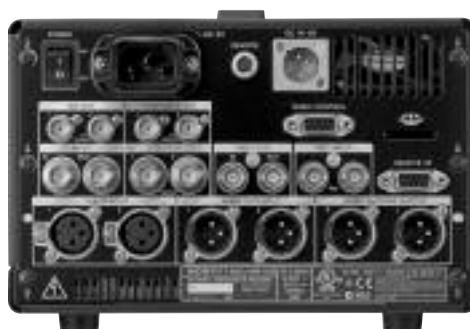
Wow & flutter

Less than 0.2% rms

HDW-S280/1 HDCAM VTR

Features

- Compact HD videocassette recorder
- Half rack width chassis
- Legacy playback includes Betacam SX, Betacam SP and Betacam
- 1080/59.94i, 1080/50i, 1080/23.98PsF, 1080/24PsF, 1080/25PsF and 1080/29.97PsF switchable operation
- Record time of up to 48 minutes at 1080/50i on an S-size cassette
- HDSDI input
- HDSDI, SDI and composite analogue output
- AC, DC and battery operation
- LCD on front panel for picture monitoring
- Low power consumption of 80W
- Built-in up and down converters



Optional Accessories

- BKP-L55 Battery Adapter
- BP-GL95 Rechargeable Lithium-ion Battery
- BP-GL65 Rechargeable Lithium-ion Battery
- BP-L80S Rechargeable Lithium-ion Battery Pack
- BC-M150 Ni-MH & Lithium-ion Battery Charger
- BC-L500 Lithium-ion Battery Charger
- BCT-HD Series HDCAM tapes
- BCT-HD12CL Head cleaning tape for HDCAM VTRs

Specifications

Power requirements:

100 to 240 V, 50/60 Hz

Power consumption:

60 W (DC operation), 80 W (AC operation)

Operating temperature:

+5 to +40°C (+41 to +104°F)

Storage temperature:

-20 to +60°C (-4 to +140°F)

Humidity:

25 to 80%

Mass:

6 kg (13 lb 4 oz)

Dimensions (W x H x D):

210 x 132 x 425 mm
(8 3/8 x 5 1/4 x 16 3/4 inches)

HDCAM record/playback time:

40 minutes (59.94 Hz), 48 minutes (50 Hz)
with BCT-40HD cassette

Fast-forward/rewind time:

Approx. 4 minutes (fast forward), 3 minutes
(rewind)

Shuttle speed:

±10 times normal speed

Jog speed:

±1 time normal speed

Servo lock time:

1.0 second or less

Load/unload time:

7 seconds or less

Continuous Operating time:

80 minutes with BP-GL95 Battery

Inputs:

HD-SDI (BNC x1, with loop through),
Reference (BNC x1, with loop through),
analogue audio (XLR 3-pin type, female
x2), time code (BNC x1)

Outputs:

HD-SDI (BNC x2), SD-SDI (BNC x2),
analogue composite (BNC x2), analogue
audio (XLR-3-pin, female x2), audio
monitor (XLR-3-pin, female x2), headphone
(JM-60 stereo phone jack, x1),
time code (BNC x1)

Remote:

RS-422 (D-sub 9-pin x1), video control
(D-sub 9-pin x1)

Others slots:

DC input (XLR-4-pin, male x1), "Memory
Stick" slot (x1)

Supplied accessories:

Operation manual, installation manual,
connector cap

Optional accessories:

BCT-6HD/12HD/22HD/32HD/40HD HDCAM
cassette, BCT-HD12CL cleaning tape,
RCC-5G remote cable, BKP-L551 battery
adaptor, BP-GL95/GL65 battery pack,
BC-M150 battery charger

HKJ-101 i.LINK Interface Board

Features

- Used with the J-H1 or J-H3
- Provides i.LINK connection between J-H1/J-H3 and DV-ready NLE systems and recorders
- HDCAM footage is down-converted to DV 25 Mb/s stream
- Connects video, audio (Max. 4 channels) and control signals

Applicable Models

J-H1 Compact HDCAM Player

J-H3 Compact HDCAM Videocassette Player



J-H1 Compact HDCAM Player

The J-H1 is a cost effective, compact and lightweight HDCAM viewer ideal for desk-top use.

Features

- HDCAM playback capability
- Supports 1080/50i and 1080/59.9i formats
- Accommodates both small and large cassettes
- Versatile output capability for flexible monitoring
- Equipped with HD analogue Y/Pb/Pr component output
- Down conversion built-in
- NTSC or PAL composite video output from both BNC and RCA output connectors
- Equipped with RGB computer display interface (at XGA resolution)
- Optional i.LINK interface board (HKJ-101)
- Shot mark handling



Supplied Accessories

Operation manual (CD-ROM) (1)
Vertical stand (1)

Optional Accessories

HKJ-101 i.LINK Interface Board

Specifications

General

Power requirements:
AC 100 to 240 V, 50/60 Hz
Power consumption:
50 W
Operating temperature:
+5 to +40°C (+41 to +104°F)
Storage temperature:
-20 to +60 °C (-4 to +140°F)
Humidity:
25 to 80% (relative humidity)

Mass:

7.5 kg (16 lb 9 oz)

Dimensions:

307(W) x 100 (H) x 397 (D) mm
(12 1/8 x 4 x 15 3/4 inches)

Tape speed

HDCAM:
96.7 mm/s (29.97 Hz)
80.7mm/s (25 Hz)

Playback time

HDCAM:
Max. 124 min (29.97 Hz, with BCT-124HDL)
Max. 149 min (25 Hz, with BCT-124HDL)

Fast forward/rewind time

Approx. 5 min with BCT-124HD

Search speed range

Shuttle mode:
±21 times normal playback speed
Job mode:
±1 times normal playback speed

Servo lock time:

1 s or less (from standby on)

Load/unload time:

7 s or less

Input output

Analogue HD video:

BNC (x 3) Y: 0.7 Vp-p, Pb/Pr:
±0.7 Vp-p 75 Ω
EIAJ RC-5237 connector, EIAJ CP-4120 standard

Analogue SD video:

BNC (x 1), Pin jack (x 1), 1.0 Vp-p, 75 Ω

Computer display:

D-sub 15 pin, XGA (1024 x 768 dots, RGB, 0.7 V

i.LINK (optional):

IEEE1394

Audio monitoring:

Pin jack (x 2): -10 dBu at 47 kΩ load, unbalanced
XLR (male x 2): +4 dBm, 600 Ω load, low impedance, balanced

Headphone:

JM-60 stereo phone jack, -∞ to -12 dBu at 8 Ω, unbalanced

RS-232C:

D-sub 9 pin male (x 1)

Wireless remote:

BIRCS

EXT SYNC:

BNC x 2

HD analogue response

Output level:

Y: 700 mV (±5%), Pb/Pr: 700 mV (±5%),
Sync signal: 300 mV (±5%)

Bandwidth:

Y: 0 to 20 MHz + 1.0 dB/-3.0 dB,
Pb/Pr: 0 to 7 MHz +1.0 dB/-3.0 dB

S/N ratio:

56 dB or more

Output impedance:

Y, Pb, Pr: 75 Ω (±5%)

Y/C delay:

Y, Pb, Pr: ±15 ns or less

- XGA analogue response -

Output level:

R: 700 mV (±5%), G: 700 mV (±5%),
B: 700 mV (±5%)

Resolution:

XGA

Refresh/rate:

60 Hz

H-frequency:

48.4 kHz

SD composite response

Output level:

Y: 59.94i: 714 mV (±5%), 50i: 700 mV (±5%)
Sync: 59.94i: 286 mV (±5%), 50i: 300 mV (±5%)
Burst: 59.94i: 286 mV (±5%), 50i: 300 mV (±5%)

Bandwidth:

0.5 to 5.75 MHz + 0.5 dB/-3.0 dB

S/N ratio:

56 dB or more

Y/C delay:

20 ns or less

K Factor (2T pulse):

1.0% or less

Analogue audio response

Output level:

XLR: +4±0.5 dBm, -20 dBFS, 600 Ω terminated
PIN: +10±0.5 dBu, -20 dBFS, 47 kΩ terminated

Frequency response:

20 Hz to 20 kHz + 1.0 dB/-1.5 dB

Dynamic range:

More than 85 dB (at 1 kHz, emphasis ON)

Distortion:

Less than 0.1% (at 1 kHz/-20 dBFS, emphasis ON)

Wow and flutter:

Less than 0.18%

J-H3 Compact HDCAM Player

The J-H3 is a cost effective, compact and lightweight HDCAM viewer ideal for desk-top use. The J-H3 is equipped with a number of features to support 24P production applications.

Features

- HDCAM playback capability
- Supporting 23.98/24/25/29.97PsF and 50i/59.94i formats
- Accommodates both small and large cassettes
- Versatile output capability for flexible monitoring
- Equipped with HD analogue Y/Pb/Pr component output
- Down conversion built-in
- Equipped with HD-SDI and SD-SDI outputs
- NTSC or PAL composite video output from both BNC and RCA output connectors
- Equipped with RGB computer display interface (at XGA resolution)
- Optional i.LINK interface board (HKJ-101)
- Timecode output
- Reference input
- RS-422 and RS-232C remote interface
- LTC output
- Shot mark handling
- TC character superimposing capability



Supplied Accessories

Operation manual (CD-ROM) (1)
Vertical stand (1)

Optional Accessories

HKJ-101 i.LINK Interface Board

Specifications

General

Power requirements:
AC 100 to 240 V, 50/60 Hz
Power consumption:
60 W
Operating temperature:
+5 to +40°C (+41 to +104°F)
Storage temperature:
-20 to +60 °C (-4 to +140°F)
Humidity:
25 to 80% (relative humidity)
Mass:
7.5 kg (16 lb 9 oz)
Dimensions:
307(W) x 100 (H) x 397 (D) mm
(12 1/8 x 4 x 15 3/4 inches)

Tape speed

HDCAM:
96.7 mm/s (29.97 Hz)
80.7 mm/s (25 Hz)
77.4 mm/s (24 Hz)

Playback time

HDCAM:
Max. 124 min (29.97 Hz, with BCT-124HDL)
Max. 149 min (25 Hz, with BCT-124HDL)
Max. 155 min (24 Hz, with BCT-124HDL)

Fast forward/rewind time

Approx. 5 min with BCT-124HD

Search speed range

Shuttle mode:
±21 times normal playback speed
Job mode:
±1 times normal playback speed

Servo lock time:

1 s or less (from standby on)

Load/unload time:

7 s or less

Input output

Digital HD video:
BNC (x 1), SMPTE-292M
Digital SD video:
BNC (x 1), SMPTE-259M
Analogue HD video:
BNC (x 3) Y: 0.7 Vp-p, Pb/Pr: ±0.7 Vp-p 75 Ω
EIAJ RC-5237 connector, EIAJ CP-4120 standard
Analogue SD video:
BNC (x 1), Pin jack (x 1), 1.0 Vp-p, 75 Ω
Computer display:
D-sub 15 pin, XGA (1024 x 768 dots, RGB, 0.7 V
i.LINK (optional):
IEEE1394
Time code:
BNC (x 1), SMPTE-12M
Audio monitoring:
Pin jack (x 2): -10 dBu at 47 kΩ load, unbalanced
XLR (male x 2): +4 dBm, 600 Ω load, low impedance, balanced
Headphone:
JM-60 stereo phone jack, -∞ to -12 dBu at 8 Ω, unbalanced
RS-232C:
D-sub 9 pin male (x 1)
RS-422A:
D-sub 9 pin female (x 1), Sony 9-pin remote interface
Wireless remote:
BIRCS
EXT SYNC:
BNC x 2

HD analogue response

Output level:
Y: 700 mV (±5%), Pb/Pr: 700 mV (±5%), Sync signal: 300 mV (±5%)
Bandwidth:
Y: 0 to 20 MHz + 1.0 dB/-3.0 dB, Pb/Pr: 0 to 7 MHz +1.0 dB/-3.0 dB
S/N ratio:
56 dB or more

Output impedance:

Y, Pb, Pr: 75 Ω (±5%)

Y/C delay:

Y, Pb, Pr: ±15 ns or less

XGA analogue response

Output level:

R: 700 mV (±5%), G: 700 mV (±5%),
B: 700 mV (±5%)

Resolution:

XGA

Refresh/rate:

60 Hz

H-frequency:

48.4 kHz

SD composite response

Output level:

Y: 59.94i: 714 mV (±5%), 50i: 700 mV (±5%)
Sync: 59.94i: 286 mV (±5%), 50i: 300 mV (±5%)
Burst: 59.94i: 286 mV (±5%), 50i: 300 mV (±5%)

Bandwidth:

0.5 to 5.75 MHz + 0.5 dB/-3.0 dB

S/N ratio:

56 dB or more

Y/C delay:

20 ns or less

K Factor (2T pulse):

1.0% or less

Analogue audio response

Output level:

XLR: +4±0.5 dBm, -20 dBFS, 600 Ω terminated
PIN: +10±0.5 dBu, -20 dBFS, 47 kΩ terminated

Frequency response:

20 Hz to 20 kHz + 1.0 dB/-1.5 dB

Dynamic range:

More than 85 dB (at 1 kHz, emphasis ON)

Distortion:

Less than 0.1% (at 1 kHz/-20 dBFS, emphasis ON)

Wow and flutter:

Less than 0.18%

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SRW-1 124

SRW-5000/1 126

SRW-5500/1 128

HKSR-5003 130

HKSR-5001/1 130

HKSR-5002 130

SRPC-1 HD Video Processor

Used with the SRW-1 HD Digital Video Cassette Recorder, the SRPC-1 HD Video Processor forms the first Sony full-bandwidth HD 4:4:4 (RGB) portable VTR system. Adopting the HDCAM-SR format, the SRW-1/SRPC-1 offers virtually lossless 1080-line high-definition recordings at multiple frame rates on the very latest HDCAM-SR tape media. Offering unprecedented HD image quality, excellent operability, and powerful interfacing capabilities, the SRW-1 and SRPC-1 offer the ideal HD portable VTR system, especially for movie-making, commercial production, and high-end television production applications.

Features

- High-quality HD field recording •Double speed recording
- Multi-frame-rate 1080 HD Recording and Playback
- 12 channels of 24 bit audio

Supplied Accessories

Operational Manual (1)

Optional Accessories

BCT-HD12CL tapes Head cleaning videocassette

tapes for HDCAM VTRs

RM-B750 Remote Control Unit

BC-M150 Ni-MH & Li-ion Battery Charger

BP-GL95 Rechargeable Lithium-ion Battery Pack

BP-GL65 Rechargeable Lithium-ion Battery Pack

RM-B150 Remote Control Unit

AC-DN2B



Specifications

General

Power requirement:
DC +12 V (DC +11 to +17 V)

Operating temperature:
0 to +40 °C

Storage temperature
-20 to +60 °C

Humidity:
25 to 80% (relative humidity)

Mass:
8.5 kg (18 lb. 12 oz)

Dimensions (W x H x D):
279 x 399 x 139 mm (11 x 15 3/4 x 5 5/8 inches)

Recording format:
HDCAM-SR

Recording/Playback time:
Normal speed recording: 50 min. with BCT-40SR cassette (24P mode)
Double speed recording: 25 min. with BCT-40SR cassette (24P mode)

Fast forward/rewind time:
5 min.

Fast forward/rewind speed:
±11 times

Search speed (Shuttle mode):
±11 times

Input/Output signals

HD serial V/A input:
BNC x 2, Serial Digital (1.485 Gb/s), SMPTE-292M/SMPTE-372M/BTA-S004/ITU-R.BT709

HD reference video input:
BNC x 1, Tri Level Sync, 0.6 Vp-p, 75 Ω, sync negative

SD reference video input:
BNC x 1, Black Burst, 0.286 Vp-p, 75 Ω, sync negative

Digital audio input:
BNC x 2 (AES/EBU)

Analogue audio input:
XLR-3pin x 4 (female)

Time code input:
BNC (x 1), 0.5 to 18 Vp-p, 10 kΩ

HD serial V/A output:
BNC x 2, serial digital (1.485 Gb/s), SMPTE-292M/SMPTE-372M/BTA-S004/ITU-R.BT709

HD serial V/A monitor output:
BNC x 1 (with character out), serial digital (1.485 Gb/s), SMPTE-292M/BTA-S004/ITU-R.BT709

SD serial V/A monitor output:
BNC x 1 (with character out), D1 serial digital (270 Mb/s), SMPTE-259M

Digital audio output (ch1 to ch12):
D-Sub multi connector

Analogue audio monitor output
XLR-3-pin x 2 (male)

Time code output:
BNC x 1, 1.0 Vp-p (75 Ω), 2.2 Vp-p (10 kΩ)

Phones:
Stereo mini jack x 2 -17 dBu

Remote input:
D-sub 9-pin, (female), Sony 9pin remote interface

Digital video performance

Sampling frequency:
Y: 74.25 MHz, Pb/Pr: 37.125 MHz
G: 74.25 MHz, B: 74.25 MHz,
R: 74.25 MHz

Quantization:
10 bits/sample

Compression:
MPEG-4 Studio Profile

Channel coding:
S-NRZ

Error correction:
Reed-Solomon code

Digital audio performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
24 bits/sample

Wow and flutter:
Below measurable level

Analogue audio performance (Playback with the SRW-5000 VTR)

Sampling frequency:
24 bits/sample

Frequency response:
20 Hz to 20 kHz, +0.5 dB/-1.0 dB (reference level)

Dynamic range:
More than 100 dB (1 kHz)

Distortion:
Less than 0.05% (at 1 kHz, reference level)

Crosstalk:
Less than -80 dB (at 1kHz, between any two channels)

SRW-1 HDCAM-SR Portable VTR

Used with the SRPC-1 HD Video Processor, the SRW-1 HD Digital Video Cassette Recorder forms the first Sony full-bandwidth HD 4:4:4 (RGB) portable VTR system. Adopting the HDCAM-SR format, the SRW-1/SRPC-1 offers virtually lossless 1080-line high-definition recordings at multiple frame rates on the very latest HDCAM-SR tape media. Offering unprecedented HD image quality, excellent operability, and powerful interfacing capabilities, the SRW-1 and SRPC-1 offer the ideal HD portable VTR system, especially for movie-making, commercial production, and high-end television production applications.

Features

- High-quality HD field recording •Double speed recording
- Multi-frame-rate 1080 HD Recording and Playback
- 12 channels of 24 bit audio

Supplied Accessories

Operational Manual (1)

Optional Accessories

BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs

RM-B750 Remote Control Unit

BC-M150 Ni-MH & Li-ion Battery Charger

BP-GL95 Rechargeable Lithium-ion Battery Pack

BP-GL65 Rechargeable Lithium-ion Battery Pack

RM-B150 Remote Control Unit

AC-DN2B



Specifications

General

Power requirement:
DC +12 V (DC +11 to +17 V)

Operating temperature:
0 to +40 °C

Storage temperature:
-20 to +60 °C

Humidity:
25 to 80% (relative humidity)

Mass:
8.5 kg (18 lb. 12 oz)

Dimensions (W x H x D):
279 x 399 x 139 mm (11 x 15 3/4 x 5 5/8 inches)

Recording format:
HDCAM-SR

Recording/Playback time:
Normal speed recording: 50 min. with BCT-40SR cassette (24P mode)
Double speed recording: 25 min. with BCT-40SR cassette (24P mode)

Fast forward/rewind time:
5 min.

Fast forward/rewind speed:
±11 times

Search speed (Shuttle mode):
±11 times

Input/Output signals

HD serial V/A input:
BNC x 2, Serial Digital (1.485 Gb/s), SMPTE-292M/SMPTE-372M/BTA-S004/ITU-R.BT709

HD reference video input:
BNC x 1, Tri Level Sync, 0.6 Vp-p, 75 Ω, sync negative

SD reference video input:
BNC x 1, Black Burst, 0.286 Vp-p, 75 Ω, sync negative

Digital audio input:
BNC x 2 (AES/EBU)

Analogue audio input:
XLR-3-pin x 4 (female)

Time code input:
BNC (x 1), 0.5 to 18 Vp-p, 10 kΩ

HD serial V/A output:
BNC x 2, serial digital (1.485 Gb/s), SMPTE-292M/SMPTE-372M/BTA-S004/ITU-R.BT709

HD serial V/A monitor output:
BNC x 1 (with character out), serial digital (1.485 Gb/s), SMPTE-292M/BTA-S004/ITU-R.BT709

SD serial V/A monitor output:
BNC x 1 (with character out), D1 serial digital (270 Mb/s), SMPTE-259M

Digital audio output (ch1 to ch12):
D-Sub multi connector

Analogue audio monitor output:
XLR-3pin x 2 (male)

Time code output:
BNC x 1, 1.0 Vp-p (75 Ω), 2.2 Vp-p (10 kΩ)

Phones:
Stereo mini jack x 2 -17 dBu

Remote input:
D-sub 9-pin, (female), Sony 9pin remote interface

Digital video performance

Sampling frequency:
Y: 74.25 MHz, Pb/Pr: 37.125 MHz
G: 74.25 MHz, B: 74.25 MHz, R: 74.25 MHz

Quantization:
10 bits/sample

Compression:
MPEG-4 Studio Profile

Channel coding:
S-NRZ

Error correction:
Reed-Solomon code

Digital audio performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
24 bits/sample

Wow and flutter:
Below measurable level

Analogue audio performance

(Playback with the SRW-5000 VTR)

Sampling frequency:
24 bits/sample

Frequency response:
20 Hz to 20 kHz, +0.5 dB/-1.0 dB (reference level)

Dynamic range:
More than 100 dB (1 kHz)

Distortion:
Less than 0.05% (at 1 kHz, reference level)

Crosstalk:
Less than -80 dB (at 1kHz, between any two channels)

SRW-5000/1 HDCAM-SR VTR

The SRW-5000/1 is a high-end HD digital videocassette recorder that employs the HDCAM-SR format.

Applications range from HDTV to digital cinematography. Key features include high-quality 1080i, 1080P, or 720P recording and playback, a wide array of internal format conversions, including 4:4:4 to 4:2:2, legacy playback of HDCAM and Digital BETACAM tape formats.

Features

- 1080 recording and playback at multiple frame rates: 23.98P, 24P, 25P, 29.97P, 50i, 59.94i
- 720P recording and playback
- Switchable 4:4:4/4:2:2 recording
- New HDCAM-SR tape format
- High-quality MPEG-4 Studio Profile compression
- 12-channels of 24-bit audio at 48kHz
- Internal format conversion
- Legacy playback
- Long recording time on a single cassette of up to 155 minutes at 1080/24P
- User-friendly controls
- Frame-accurate insert/assemble editing
- High-speed colour picture search
- Dynamic Tracking playback
- Digital-Jog Sound
- Dynamic Motion Control (DMC) playback
- Pre-read editing
- Confidence playback
- Selectable picture modes including squeeze, letter box, and edge crop
- Audio-output channel routing; can route audio to any HD-SDI or SDI output
- Dual-sync operation
- Off-speed playback capability
- Programme play with audio pitch correction
- Built-in Tele-File read/write capability
- Metadata Handling
- Newly designed DT-Head
- New tape formula
- Easy maintenance



Supplied Accessories

- PSW4 x 16screws, for rack mounting (4)
- CD-ROM (Operation manual & Maintenance manual part 1) (1)
- Memory Stick/PC Card adapter (1)

Optional Accessories

- HKSR-5001/1 Format Converter Board
- HKSR-5002 Digital BETACAM Processor Board
- HKSR-5003 RGB Processor Boards
- RMM-110 Rack Mount Kit
- BCT-HD12CL tapes Head cleaning videocassette tapes for HDCAM VTRs

Specifications

General

Power requirements:
100 to 240 V AC ($\pm 10\%$, 50/60 Hz)

Power consumption:
230 W

Operating temperature:
+ 5 °C to +40 °C (+41 °F to +104 °F)

Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)

Operating humidity:
25% to 80% (relative humidity)

Mass (approx.):
30 kg (66 lb. 2 oz)

Dimensions (W x H x D excluding protrusions):
427 x 218 x 544 mm (16 3/4 x 8 5/8 x 21 1/2 inches)

Tape speed:
94.2 mm/s (24P mode)

Digital recording/Playback time:
Max. 155 min with BCT-124SR cassette (24P mode)

Fast-forward/rewind time:
Approx. 3 min with BCT-124SR cassette

Search-speed range:
 ± 50 times normal playback speed (24P mode)

Servo-lock time:
1.0 s or less (from standby on)

Load/unload time:
6.0 s or less

Input/Output

HD serial V/A input:
BNC (x 1 with monitoring loop-through),
Serial digital (1.485 Gb/s), SMPTE 292M/BTA
S-004/ITU-R.BT 709

HD/SD reference video input 1:
BNC (x 1, with loop-through), Tri Level sync,
0.6 Vp-p, 75 Ω , sync negative or Black
Burst, 0.286 Vp-p, 75 Ω , sync negative

HD/SD reference video input 2 (optional
HKS-5001 required):
BNC (x 1, with loop-through), Black Burst,
0.286 Vp-p, 75 Ω , sync negative

Digital-audio input (CH1/2, CH3/4, CH5/6,
CH7/8, CH9/10, CH11/12):
BNC (x 6, AES/EBU)

Time-code input:
XLR-3-pin type, (female x 1), 0.5 to 18 Vp-p,
10 k Ω , balanced

HD serial V/A output:
BNC (x 3, with character out), Serial digital
(1.485 Gb/s), SMPTE 292M/BTA
S004/ITU-R.BT 709

Format-converter output (optional HKS-5001
required):
BNC (x 2), with character out

Standard-definition V/A output:
BNC (x 3, with character out), D1 serial
digital (270 Mb/s), SMPTE 259M

Analogue I/O down-converted output:
Composite: BNC (x 1 with character out)
1.0 Vp-p, 75 Ω , sync negative)
SD sync: BNC (x 1, Black Burst, 0.286 Vp-p,
75 Ω , sync negative)

Analogue I/O reference output:
1125 Sync: BNC (x2), Tri Level sync, 0.6
Vp-p, 75 Ω , sync negative

Digital-audio output (CH1/2 CH3/4 CH5/6
CH7/8 CH9/10 CH11/12):
BNC (x 6), AES/EBU, unbalanced

Analogue-audio output (CH1/2/3/4/Cue):
XLR-3-pin type, (male x 5), +4 dBm, (with a
600 Ω load), low impedance, balanced

Monitor output (L/R):
XLR-3-pin type, (male x 2), +4 dBm, (with a
600 Ω load), low impedance, balanced

Time-code output:
XLR-3-pin type, (male x 1), 2.2 Vp-p low
impedance, balanced

Phones:
JM-60 stereo phone jack, - ∞ to -12 dBu
(with an 8 Ω load), unbalanced

Remote 1 input:
D-sub 9-pin, (female), Sony 9-pin remote
interface

Remote 1 input/output:
D-sub 9-pin, (female), Sony 9-pin remote
interface

RS-232C:
D-sub 9-pin, (male)

Video control:
D-sub 9-pin, (female), (for optional
HKDV-503)

Parallel remote:
D-sub 50-pin, (female)

Network:
10Base-T modular jack

Digital-Video Performance

Sampling frequency:
Y: 74.25 MHz, PB/PR: 37.125 MHz

Quantization:
10 bits/sample

Compression:
MPEG-4 Studio Profile

Channel coding:
S-NRZ

Error correction:
Reed-Solomon code

Error concealment:
Adaptive three-dimensional

Analogue Composite-Output Performance

Bandwidth
Y: 0 to 5.75 MHz +5.0 dB/-3.0 dB

S/N ratio:
56 dB or more

Y/C delay:
15 ns or less

K Factor (2T Pulse):
1 % or less

Output SCH phase:
Based upon RS-170A/CCIR R.624-3

Digital-Audio Performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
24 bits/sample

Wow & flutter:
Below measurable level

Headroom:
20 dB (or 18 dB selectable)

Analogue Audio-Output Performance

D/A quantization:
24 bits/sample

Frequency response:
20 Hz to 20 kHz, +0.5 dB/-1.0 dB (0 dB at
1 kHz)

Dynamic range:
More than 100 dB (At 1 kHz)

Distortion:
Less than 0.05% (At 1 kHz, reference level)

Crosstalk:
Less than -90 dB (At 1 kHz, between any
two channels)

De-emphasis:
T1 = 50 μ s, T2 = 15 μ s (auto on/off)

SRW-5500/1 HDCAM-SR VTR

The SRW-5500/1 is a high-end HD digital videocassette recorder that employs the HDCAM-SR format. This VTR also allows recording and playback of the well-proven HDCAM format. Applications range from HDTV to digital cinematography. Key features include high-quality 1080i, 1080PsF, or 720P recording and playback, a wide array of internal format conversions, including 4:4:4 to 4:2:2, legacy playback of Digital BETACAM tape formats.

Features

- 1080 recording and playback at multiple frame rates: 23.98PsF, 24PsF, 25PsF, 29.97PsF, 50i, 59.94i in HDCAM and HDCAM-SR formats
- 720P recording and playback (HDCAM-SR only)
- Switchable 4:4:4/4:2:2 recording (option)
- High quality MPEG-4 studio profile compression
- High quality audio recording: 12 channels, 24-bit audio at 48kHz in the HDCAM-SR format
- Internal format conversion including up and down conversion, 4:4:4 to 4:2:2 conversion
- Playback of Digital Betacam format tapes
- Long recording time on a single cassette of up to 155 minutes at 1080/24PsF
- User friendly controls
- Frame accurate insert/assemble editing
- High speed colour picture search
- Dynamic tracking playback
- Digital jog sound
- Dynamic Motion Control (DMC) playback
- Pre-read editing
- Confidence playback
- Selectable picture modes including squeeze, letter box and edge crop
- Audio output channel routing: can route audio to any HD-SDI or SDI output
- Dual-sync operation
- Off-speed playback capability
- Programme play with audio pitch correction
- Built-in tele-file read/write capability
- Metadata handling
- Newly designed DT-Head
- New HDCAM-SR tape formula for high reliability and durability
- Easy maintenance



Supplied Accessories

- PSW4 x 16 screws for rack mounting (4)
- CD-ROM Operation manual and Maintenance
- Manual part 1 (1)
- Memory Stick / PC card adaptor (1)

Optional Accessories

- HKSR-5001/1 Format Converter Board
- HKSR-5002 Digital BETACAM Processor Board
- HKSR-5003 RGB Processor Boards
- RMM-110 Rack Mount Kit
- BCT-HD12CL tapes Head Cleaning
- Videocassette Tapes for HDCAM VTRs
- BCT-HD Series HDCAM Tapes
- BCT-SR Series HDCAM-SR Tapes

Specifications

General

Power requirements:
100 to 240 V AC ($\pm 10\%$, 50/60 Hz)

Power consumption:
230 W (without options)/320 W (with all option boards installed)

Operating temperature:
 $+5^{\circ}\text{C}$ to $+40^{\circ}\text{C}$ ($+41^{\circ}\text{F}$ to $+104^{\circ}\text{F}$)

Storage temperature:
 -20°C to $+60^{\circ}\text{C}$ (-4°F to $+140^{\circ}\text{F}$)

Operating humidity:
25% to 80% (relative humidity)

Mass (approx.):
30 kg (66 lb 2 oz)

Dimensions (W x H x D excluding protrusions):
427 x 218 x 544 mm
(16 $\frac{1}{8}$ x 8 $\frac{5}{8}$ x 21 $\frac{1}{2}$ inches)

Tape speed:
HDCAM-SR: 94.2 mm/s (24 Hz)
HDCAM: 77.4 mm/s (24 Hz)
Digital Betacam: 96.7 mm/s

HDCAM-SR/HDCAM recording/
Playback time
155 min with BCT-124SR cassette (24 Hz) with BCT-124SRL

Digital Betacam playback time
124 minutes with BCT-D124L tape

Fast-forward/rewind time
Approx. 4 min with BCT-124SR cassette

Search speed range
Shuttle mode
HDCAM-SR: Still to ± 50 times normal playback speed (24 Hz)
HDCAM: Still to ± 58 times normal playback speed (25 Hz)
Digital Betacam: Still to ± 50 times normal playback speed

Variable mode
HDCAM-SR: -1 to 2 times normal playback speed
HDCAM: -1 to 2 times normal playback speed
Digital Betacam: -1 to 3 times normal playback speed

Jog Mode
HDCAM-SR: Still to ± 2 times normal playback speed
HDCAM: Still to ± 3 times normal playback speed
Digital Betacam: Still to ± 3 times normal playback speed

Dynamic Tracking Range
-1 to +2 times normal playback speed

Servo-lock time
1.0 sec or less (from standby on)

Load/unload time
7.0 sec or less

Input/Output

HD-SDI input A
BNC (1 + 1 for monitoring loop-through),
Serial digital (1.485 Gb/s),
SMPTE 292M/BTA S-004/ITU-R.BT 709

HD-SDI input B (optional HKSR-5003 required)
BNC (1 + 1 for monitoring loop-through),
Serial digital (1.485 Gb/s),
SMPTE 292M/BTA S-004/ITU-R.BT 709

HD/SD reference video input 1
BNC (1 + 1 for loop-through), Tri Level sync,
0.6 Vp-p, 75 Ω , sync negative or Black Burst, 0.286 Vp-p, 75 Ω , sync negative

HD/SD reference video input 2
(optional HKSR-5001 required)
BNC (1 + 1 for loop-through),
Tri Level sync, 0.6 Vp-p,
75 Ω , sync negative or Black Burst,
0.286 Vp-p, 75 Ω , sync negative

Digital-audio input (CH1/2, CH3/4, CH5/6, CH7/8, CH9/10, CH11/12)
BNC (x6, AES/EBU), unbalanced

Analogue audio input (Cue)
XLR-3-pin, female x1

Time-code input
XLR-3-pin type, (female x1), 0.5 to 18 Vp-p,
10 k Ω , balanced

HD-SDI output
BNC (x3, with character out), Serial digital (1.485 Gb/s), SMPTE 292M/BTA S004/ITU-R.BT 709

Format-converter output
(optional HKSR-5001 required)
BNC (x2), with character out

SD-SDI output
BNC (2 + 1 with character out),
D1 serial digital (270 Mb/s), SMPTE 259M

Analogue down-converted output
Composite: BNC (x1 with character out)
1.0 Vp-p, 75 Ω , sync negative)
SD sync: BNC (x1, Black Burst, 0.286 Vp-p,
75 Ω , sync negative)

Analogue reference output
1125 Sync: BNC (x2), Tri Level sync,
0.6 Vp-p, 75 Ω , sync negative

Digital-audio output (CH1/2 CH3/4 CH5/6 CH7/8 CH9/10 CH11/12)
BNC (x6), AES/EBU, unbalanced

Analogue-audio output (CH1/2/3/4/Cue*)
XLR-3-pin type, (male x5), +4 dBm,
(with a 600 Ω load),
low impedance, balanced

Monitor output (L/R)
XLR-3-pin type, (male x2), +4 dBm, (with a 600 Ω load), low impedance, balanced

Time-code output
XLR-3-pin type, (male x1),
2.2 Vp-p low impedance, balanced

Phones
JM-60 stereo phone jack, $-\infty$ to 12 dBu
(with an 8 Ω load), unbalanced

Remote 1 input
D-sub 9-pin, (female),
Sony 9-pin remote interface

Remote 1 input/output
D-sub 9-pin, (female),
Sony 9-pin remote interface

Video control
D-sub 9-pin, (female),
(for optional HKDV-900)

Parallel remote
D-sub 50-pin, (female)

Ethernet
10Base-T modular jack

Digital-Video Performance

Sampling frequency
HDCAM-SR: Y: 74.25 MHz,
Pb/Pr: 37.125 MHz, G/B/R: 74.25 MHz
HDCAM: Y: 74.25 MHz, Pb/Pr: 37.125 MHz

Quantization
10 bits/sample

Compression
HDCAM-SR: MPEG-4 Studio Profile
HDCAM: Coefficient Recording System

Channel coding
S-NRZ

Error correction
Reed-Solomon code

Error concealment
Adaptive three-dimensional

Analogue Composite-Output Performance

Bandwidth
Y: 0 to 5.75 MHz +5.0 dB/-3.0 dB

S/N ratio
56 dB or more

Y/C delay
15 ns or less

K Factor (2T Pulse)
1% or less

Output SCH phase
Based upon RS-170A/CCIR R.624-3

Digital-Audio Performance

Sampling frequency
48 kHz (synchronized with video)

Quantization
HDCAM-SR: 24 bits/sample
HDCAM: 20 bits/sample

Wow & flutter
Below measurable level

Headroom
20/18/16/12 dB

Analogue Audio-Output Performance

D/A quantization
24 bits/sample

Frequency response
20 Hz to 20 kHz, +0.5 dB/-1.0 dB
(0 dB at 1 kHz)

Dynamic range
More than 100 dB (At 1 dB at 1 kHz)

Distortion
Less than 0.05% (At 1 kHz, reference level)

Crosstalk
Less than -80 dB
(At 1 kHz, between any two channels)

De-emphasis
T1 = 50 μs , T2 = 15 μs (auto on/off)

HKSR-5001/1 Format Converter Board

Optional board for the SRW-5000/1 and SRW-5500/1
HDCAM-SR VTR

Features

- Provides a wide range of format conversions, both upconversion and downconversion, from HD-SDI (both 1080 & 720) to SDI, and from 4:4:4 to 4:2:2
- 2-3 pull-down conversion capability •1080/720P cross-conversion

Applicable Models

SRW-5000/1 HDCAM-SR VTR
SRW-5500/1 HDCAM-SR VTR

HKSR-5002 Digital Betacam Processor Board

Optional board for the SRW-5000/1 and SRW-5500/1
HDCAM-SR VTR

Features

- Provides the SRW-5000/1 and SRW-5500/1 with the capability to playback Digital Betacam tapes for output in both HD and SD

Applicable Models

SRW-5000/1 HDCAM-SR VTR
SRW-5500/1 HDCAM-SR VTR

HKSR-5003 RGB Processor Boards

Optional board for the SRW-5000/1 and SRW-5500/1
HDCAM-SR VTR

Features

- Provides the SRW-5000/1 and SRW-5500/1 with the capability to record and playback RGB (4:4:4) signals

Applicable Models

SRW-5000/1 HDCAM-SR VTR
SRW-5500/1 HDCAM-SR VTR

DSR-450WSPL	132
DSR-400PK	134
DSR-400PL	135
DSR-250P/1	136
DSR-PD170P	138
DSR-2000AP	140
DSR-1800AP	142
DSR-1600AP	144
DSR-1500AP	146
DSR-45AP	148
DSR-11	149
DSR-50P	150
DSR-DR1000AP	151
DVStation	152

DSR-450WSPL DVCAM Camcorder

Features

- 2/3-inch type power HAD EX CCD •Switchable aspect ratio (16:9/4:3) •12-bit A/D conversion •Advanced digital signal processing (ADSP) •DVCAM/DV selectable recording •Long recording time: up to 276 minutes at DV (SP) mode and up to 184 minutes at DVCAM mode with a standard-size cassette •High-Quality audio recordings •Film-like images with progressive mode •Digital output to external devices via an i.LINK interface •Quick FF/REW capabilities •Rugged and ergonomic design •Compact and lightweight: approximately 6.5 kg (14 lb 5 oz) including the DXF-801 viewfinder, microphone, BP-GL65 battery, mini-size DVCAM cassette and VCL-917BY lens (supplied with the DSR-400PK package) •Low power consumption of approximately 17 W (with the DC 12 V power supply, REC mode, viewfinder and LCD monitor off) •User-friendly menu controls •Optical ND filter and electric CC filter •Battery-remaining display on the viewfinder and LCD monitor •Intelligent light system •2.5-inch (*1) type colour LCD monitor •Supplied DXF-801 viewfinder •User assignable function-buttons •Turbo gain: max. 36 dB •Slow shutter mode: 1 to 8 to 16 frames accumulation •Optional camera adaptor for wireless microphone receiver •Memory stick system stores camera setup parameters •Adjustable shoulder pad •Versatile interfaces: SDI output and composite input with the optional boards •Camera remote control via Sony RM-B150/B750 •TruEye processor •Adaptive highlight control •Triple skin tone detail control •Electronic soft focus •Selectable gamma table including film-like gamma •Variable black gamma range •Auto Tracing White balance (ATW) •Multi-matrix function •Colour temperature control •Interval recording

(*1) Viewable area measured diagonally.



Supplied Accessories

DXF-801 Viewfinder with microphone holder (1)
VCT-U14 Tripod Adaptor (1)
External microphone (1)
Shoulder strap (1)

Optional Accessories

LC-H300 Hard Carrying Case
CA-WR855 Camera Adaptor
WRR-855A UHF Synthesized Diversity Tuner
ECM-670 Electret Condenser Microphone
ECM-672 Electret Condenser Microphone
DX-51 5-inch Monochrome Viewfinder
RM-B750 Remote Control Unit
RM-B150 Remote Control Unit
BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-L60S Rechargeable Lithium-ion Battery Pack
BC-L70 Li-ion Battery Charger
BC-L500 Li-ion Battery Charger

BC-M150 Ni-MH & Li-ion Battery Charger
AC-DN10 AC Adaptor/Charger
LC-DS300SFT Soft Carrying Case
LCR-1 Camera Rain Cover
CCFD-L Cables DV Cables (6-pin to 4-pin)
CCF-L Cables DV Cables (6-pin to 6-pin)
CBK-SC01 Analogue Composite Input Board
CBK-SD01 SDI Output Board

Specifications

GENERAL

Power requirements

DC 12 V (11 to 17V)

Power consumption

Approx. 17 W (with DC 12 V power supply, REC mode, viewfinder off, LCD monitor off)

Operating temperature

0 to +40 °C (+32 to +104 °F)

Storage temperature

-20 to +60 °C (-4 to +140 °F)

Operating humidity

25 to 85%

Mass Approx.

6.5 kg (14 lb 5 oz) (with viewfinder, microphone, BP-GL65 battery, mini-size DVCAM cassette, VCL-917BY lens)

Continuous operating time

Approx. 300 min. with BP-GL95 battery, REC mode

SIGNAL INPUTS/OUTPUTS

Video inputs

Analogue composite

BNC, 1.0 Vp-p, 75 Ω
(with the CBK-SC01)

Genlock video

BNC, 1.0 Vp-p, 75 Ω

Audio input (CH-1/2)

XLR-3 (2), female, -60 dBu/+4 dBu,
10 kΩ, balanced

Microphone input

XLR-3, female, -60 dBu

Time code input

BNC, 0.5 to 18 Vp-p, 10 kΩ

Video outputs

SDI

BNC, 0.8 Vp-p, 75 Ω
(with the CBK-SD01)

i.LINK

i.LINK, 6-pin IEEE 1394-based

Analogue composite

BNC, 1.0 Vp-p, 75 Ω

Audio output

(CH-1/2) Pin-jacks (2), -10dBu, 47 kΩ

Time code output

BNC, 1.0 Vp-p, 75 Ω

Monitor output

BNC, 1.0 Vp-p, 75 Ω

Earphone output

Mini-jack

OTHER INPUTS/OUTPUTS

Lens

12-pin

VF

20-pin

Remote

8-pin

Wireless microphone

7-pin

Light

2-pin, DC 12 V, max. 50 W

DC input

XLR-4-pin, male, DC 11 to 17 V

DC output

4-pin (for wireless microphone receiver),
DC 12 V (max. 0.2 A)

Battery terminal

5-pin

CAMERA PERFORMANCE

Pickup device

Pickup device

3-chip 2/3-inch type Power HAD EX CCD

Aspect ratio

16:9/4:3 switchable

Total picture elements (H x V)

1038 x 1188

Effective picture elements (H x V)

980 x 1064

Optical system

Spectral system

F1.4 prism (with quarts filter)

Built-in filters

1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND

Lens mount

2/3-inch type Sony bayonet mount

Electrical characteristics

Signal system

PAL colour system

Scan format

625/50i, 625/25P

Sync system

Internal and External with the VBS or
BS signal

A/D conversion

12 bits

Sensitivity

F11 (typical) (2000 lx, 89.9% reflectance)

Minimum illumination

0.5 lx (F1.4 lens, +36 dB gain,
shutter off), 0.03 lx (with slow shutter
mode at 16 frames accumulation)

Smear level

-140 dB (typical)

Video S/N ratio

63 dB (typical)

Horizontal resolution

850 TV lines (4:3 mode),
800 TV lines (16:9 mode)

Vertical resolution

530 TV lines (with EVS) and
480 TV lines (without EVS)
at 625/50i mode
575 TV lines at 625/25P mode

Shutter speed

1/60, 1/125, 1/250, 1/500, 1/1000,
1/2000 s at 625/50i mode
1/33, 1/50, 1/100, 1/125, 1/250, 1/500,
1/1000, 1/2000 s at 625/25P mode

ECS

50 to 6000 Hz at 625/50i mode
25 to 6000 Hz at 625/25P mode

Slow shutter

1/25, 1/12.5, 1/8.3, 1/6.3, 1/5, 1/4.2,
1/3.6, 1/3.1, 1/1.6 s (1 to 8, 16 frames)

Gain selection

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36 dB
(for GAIN LOW, GAIN MID, GAIN HIGH
and GAIN TURBO positions)

VIDEO PERFORMANCE

Recording format

Video

DVCAM/DV (SP) (25 Mb/s)

Audio

2 ch/16-bit/48 kHz, 2 ch/12-bit/32 kHz

Record/playback time

DVCAM: 184 min (with the PDV-184ME),
DV SP: 276 min (with the PDV-184ME)

Fast forward time

Approx. 45 s (with the PDVM-40ME),
approx. 2 min 30 s (with the PDV-184ME)

Rewind time

Approx. 45 s (with the PDVM-40ME),
approx. 2 min 30 s (with the PDV-184ME)

Recommended recording media

PDV-184ME/124ME/94ME/64ME/34ME/
184N/124N/94N/64N/34N, PDVM-184ME/
124ME/94ME/64ME/34ME/184N/124N/
94N/64N/34N

Sampling frequency

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization

8 bits

MICROPHONE

Frequency response

48 kHz: 20 Hz to 20 kHz +0.5/-1.0 dB,
32 kHz: 20 Hz to 14.5 kHz +0.5/-1.0 dB

Dynamic range

More than 80 dB

Distortion (at 1 kHz, emphasis ON, reference level)

Less than 0.12%
(at 1 kHz, reference level, 48 kHz)

BUILT-IN LCD MONITOR

Built-in LCD monitor 2.5-inch type colour

LCD monitor, resolution:

214,000 (964 x 222) pixels

VIEWFINDER

CRT

1.5-inch type monochrome

Indicators

REC TALLY (2), TAKE TALLY, BATT,
SHUTTER, GAIN UP

Horizontal resolution

600 TV lines

MICROPHONE

Microphone

Electret condenser microphone
(detachable)

DSR-400PK DVCAM Camcorder

Features

Three 2/3-inch type Power HAD EX CCDs • 2.5-inch colour LCD monitor • 4:3 aspect ratio • 12-bit A/D conversion • Advanced DSP (Digital Signal Processing) • TruEye precessing for faithful colour reproduction • Skin Tone Detail with auto detection of active area • Playback capability of DV recorded tapes (SP mode only) • Long recording time : up to 184 minutes with a standard-size cassette and 40 minutes with a minisize cassette • Interval recording • Scene file store on Memory Stick for quick and convenient set-up • Assignable buttons • i.LINK (DV) output • INFO battery system with BP-GL95/GL65 batteries for precise battery remain indication • Adjustable shoulder pad (The package includes Fujinon 17x zoom lens)



Supplied Accessories

DXF-801 Viewfinder
Microphone
VCT-U14 Tripod Adaptor
VCL-917BY Zoom Lens
Shoulder strap
Lens mount cap
Operating instructions
VCL-917BY Zoom Lens

Optional Accessories

LC-H300 Hard Carrying Case
CA-WR855 Camera Adaptor
WRR-855A UHF Synthesized Diversity Tuner
ECM-670 Electret Condenser Microphone
ECM-672 Electret Condenser Microphone
DX-51 5-inch Monochrome Viewfinder
BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-L60S Rechargeable Lithium-ion Battery Pack
BC-L70 Li-ion Battery Charger
BC-L500 Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
AC-DN10 AC Adaptor/Charger
LC-DS300SFT Soft Carrying Case
LCR-1 Camera Rain Cover
CCFD-L Cables DV Cables (6-pin to 4-pin)
CCF-L Cables DV Cables (6-pin to 6-pin)

DSR-400PL DVCAM Camcorder

Features

Three 2/3-inch type Power HAD EX CCDs • 2.5-inch colour LCD monitor • 4:3 aspect ratio • 12-bit A/D conversion • Advanced DSP (Digital Signal Processing) • TruEye precessing for faithful colour reproduction • Skin Tone Detail with auto detection of active area • Playback capability of DV recorded tapes (SP mode only) • Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a minisize cassette • Interval recording • Scene file store on Memory Stick for quick and convenient set-up • Assignable buttons • i.LINK (DV) output • INFO battery system with BP-GL95/GL65 batteries for precise battery remain indication • Adjustable shoulder pad The package does not include lens)



Supplied Accessories

DXF-801 Viewfinder
Microphone
VCT-U14 Tripod Adaptor
Shoulder strap
Lens mount cap
Operating instructions

Optional Accessories

LC-H300 Hard Carrying Case
CA-WR855 Camera Adaptor
WRR-855A UHF Synthesized Diversity Tuner
ECM-670 Electret Condenser Microphone
ECM-672 Electret Condenser Microphone
DX-51 5-inch Monochrome Viewfinder
BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-L60S Rechargeable Lithium-ion Battery Pack
BC-L70 Li-ion Battery Charger
BC-L500 Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
AC-DN10 AC Adaptor/Charger
LC-DS300SFT Soft Carrying Case
LCR-1 Camera Rain Cover
CCFD-L Cables DV Cables (6-pin to 4-pin)
CCF-L Cables DV Cables (6-pin to 6-pin)

DSR-250P/1 DVCAM Camcorder

Features

- Compact and lightweight: 4.4 kg (9 lb 11 oz)
- Newly developed 1/3-inch type CCDs for accurate colour reproduction
- Capable of both interlace scan, for moving images, and progressive scan, for still images or shooting a moving subject^{*1} and exporting a frame of the image as a still picture
- DSP (Digital Signal Processing)
- 2.5-inch (200,000 dot) colour LCD monitor
- 12x lens^{*2} with Super SteadyShot system
- New, high-resolution 1.5-inch black & white viewfinder
- 16:9 recording mode available (electronically processed)
- Recording and playback capability with standard and mini-size DVCAM and DV tapes (SP mode only)
- Three XLR audio input connectors for professional microphones (one at front, two at rear)
- Audio dubbing capability (48 kHz/16-bit or 32 kHz/12-bit selectable)
- Long recording time: 184 minutes with a standard-size cassette in DVCAM mode, or 270 minutes in DV SP mode
- Time/date data superimposition on output pictures
- Digital still camera functions with Memory Stick
- Light output (DC 12 V, max. 30 W) and additional DC 12 V out for optional accessories
- Time code preset capability
- i.LINK (DV) interface
- LANC interface for simple editing with a LANC-equipped recorder or editing system
- Supplied RMT-811 Remote Commander

^{*1} When recording moving images in progressive scan mode, the motion will display some jitter since the picture is read/output every 1/12.5 second.

^{*2} Digital zoom of 24x or 48x available via menu selection.



Supplied Accessories

DXF-801 Electronic Viewfinder (1)
 ECM-NV1 Monaural Microphone (1)
 RMT-811 Remote Commander and R6
 Batteries (2)
 Lens Hood (1)
 Lite Hood Cap (1)

Optional Accessories

CAC-12 Camera Microphone Holder
 VCT-U14 Tripod Adaptor
 BC-M150 Ni-MH & Li-ion Battery Charger
 BC-L70 Li-ion Battery Charger
 BP-L60S Rechargeable Lithium-ion Battery
 Pack
 AC-DN2B AC Adaptor
 VMC-IL46 cables 4-pin <-> 6-pin i.LINK
 Cable
 VMC-IL66 cables 6-pin <-> 6-pin i.LINK
 Cable
 CCF-L Cables DV Cables (6-pin to 6-pin)
 CCFD-L Cables DV Cables (6-pin to 4-pin)
 VCL-HG0758 Wide Conversion Lens for the
 DSR-250P/1, DSR-170
 VCL-HG1758 Tele Conversion Lens
 VF-58PK Filter Kit
 ECM-670 Electret Condenser Microphone
 ECM-670 Electret Condenser Microphone (E)
 ECM-672 Electret Condenser Microphone
 ECM-672 Electret Condenser Microphone (E)

Specifications

GENERAL

Power requirements:

DC 12 V (11 to 17 V)

Power consumption:

10.5 W using the viewfinder

12.1 W using the viewfinder and LCD monitor

Operating temperature:

0 to 40 °C (32 to 104 °F)

Storage temperature:

-20 to 60 °C (-4 to 140 °F)

Dimensions (W x H x D):

241.7 x 251.2 x 508.8 mm (9 5/8 x 10 x

20 1/8 inches) including microphone

Mass (camcorder only):

Approx. 4.4 kg (9 lb 11 oz)

CAMERA PARTS

Lens:

12:1 Variable Speed (1.2-22 s) zoom lens

F = 6.0 to 72.0 mm; F1.6 to 2.4; Filter

Diameter 58mm

Focus:

Auto/Manual (ring)/Infinity/One push auto

Imaging device:

Three 1/3-inch type CCDs, 450,000 pixels,

Progressive/Interlace Scan

White balance:

Auto/One-push(Memory A/Memory

B)/Outdoor (5800 K)/Indoor (3200 K)

Shutter speed:

1/3, 1/6, 1/12, 1/25, 1/50, 1/60, 1/100,

1/120, 1/150,

1/215, 1/300, 1/425, 1/600, 1/1000, 1/1250,

1/1750,

1/2500, 1/3500, 1/6000, 1/10000 second

Exposure:

Auto/Manual

Minimum illumination:

2 lx

Horizontal resolution:

530 TV lines

Viewfinder:

1.5-inch type Black & White CRT, Zebra

Pattern (DXF-801)

VTR PARTS

Audio signal

Rec: 48 kHz/16-bit, 32 kHz/12-bit

Playback: 48 kHz/16-bit, 32 kHz/12-bit,

32 kHz/16-bit, 44.1 kHz/16-bit

Built-in speaker:

Dynamic Speaker

LCD:

TFT Active Matrix, 2.5-inch, 200,640 dots

(880 x 228)

Tape speed:

Approx. 28.2 mm/s (DVCAM mode)

Approx. 18.8 mm/s (DV SP mode)

Maximum recording time:

184 minutes (DVCAM mode), 270 minutes

(DV SP mode) with PDV-184ME cassette

40 minutes (DVCAM mode), 60 minutes

(DV SP mode) with PDVM-40ME cassette

Video signal:

CCIR Standard, PAL colour system

Connectors

Video IN/OUT:

RCA pin: (1)

Luminance signal: 1 Vp-p, 75 Ω ,

unbalanced, sync negative

Monitor OUT:

BNC pin: (1)

Luminance signal: 1 Vp-p, 75 Ω ,

unbalanced, sync negative

Audio IN/OUT

RCA pin: (2)

245 mV, Output impedance with less than

2.2 k, Input impedance with more than

47 k

S-Video IN/OUT:

Mini-DIN 4 pin: (1)

Luminance signal: 1 Vp-p, 75 Ω ,

unbalanced, Chrominance signal: 0.3 Vp-p

(PAL)

Audio IN:

XLR 3-pin (female) x 3, -60 dBu 6.8 k,

+4 dBu 6.8 k (0 dBu = 0.775 V rms)

DV IN/OUT:

6-pin (with lock): (1)

LANC:

Stereo minimini jack (2.5 mm) : (1)

Headphone:

Stereo mini jack (3.5 mm): (1)

External DC IN:

12 V, XLR 4-pin (male): (1)

DC OUT for Light:

12 V, max. 30 W: (1)

DC OUT:

12 V, 4 pin: (1)

DSR-PD170P DVCAM Camcorder

The DSR-PD170P is a 1/3-inch type 3CCD Digital Camcorder that uses the DVCAM format. Like its predecessor, the market acclaimed DSR-PD150P, the DSR-PD170P addresses a broad spectrum of applications from video journalism, wedding and event videography, corporate and training productions, up to broadcast newsgathering, areas where picture quality, reliability, and mobility are prime concerns. In addition to inheriting all the attractive features of the DSR-PD150P, the DSR-PD170P offers a range of enhancements for further improved audio and video quality and operability, and adds new accessories to meet even more diverse shooting scenarios. The DSR-PD170P is designed to become a handy tool for professional shooting in a wide range of applications.



Features

- Three 1/3-inch type CCDs Camera System •Advanced HAD Technology •Low Light Shooting •Optical 12x Zoom Lens •Optical Super SteadyShot System •Large 180,000-dot LCD Precision Black & White Viewfinder
- DVCAM Recording •16:9 Widescreen Acquisition Mode
- DVCAM/DV Selectable Recording •2 Ch. XLR Audio Input and Supplied Directional Microphone •16-bit/12-bit PCM Digital Sound and Audio Dub Capability •Newly Developed Hybrid LCD Monitor with a High Resolution of more than 210,000 Pixels •Simultaneous Operation of LCD Monitor and Viewfinder •Large-sized Handle
- On-handle Zoom Lever and Rec. Start/Stop Button
- Supplied Lens Hood with Built-in Lens Cap •Supplied Wide Conversion Lens and Additional Lens Hood

Supplied Accessories

AC-L15 AC Adaptor (1)
 ECM-NV1 Electret Condenser Microphone (1)
 NP-F330 Info LITHIUM Rechargeable Battery Pack (1)
 VCL-HG0758 Wide Conversion Lens (1)
 LSF-S58 Lens Hood for Wide Conversion Lens and Hood Cap (1)
 Lens Hood with Built-in Lens Cap (1)
 RMT-811 Remote Commander and R6 Batteries (2)
 Carrying Belt (1)
 i.LINK Cable Strap (1)
 Stereo AV Cable (1)

Optional Accessories

2NP-F970/B InfoLITHIUM Rechargeable Battery Pack
 NP-F570 InfoLITHIUM Rechargeable Battery Pack
 NP-F770 InfoLITHIUM Rechargeable Battery Pack
 NP-F970 InfoLITHIUM Rechargeable Battery Pack
 AC-VQ1050B Battery Charger
 VCL-HG1758 Tele Conversion Lens
 VF-58PK Filter Kit
 VCT-PG11RMB Tripod with RM-1BP
 RM-1BP LANC Remote Controller
 VMC-IL44 cables 4-pin <-> 4-pin i.LINK Cable
 VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
 PDV-ME Digital Videocassette Tapes
 MSA-A "Memory Stick" IC Memory Media

UWP-C1 UHF Synthesized Wireless Microphone Package (62CE7)
 UWP-C1 UHF Synthesized Wireless Microphone Package (67CE7)
 ECM-670 Electret Condenser Microphone (U)
 ECM-672 Electret Condenser Microphone (U)

Specifications

GENERAL

Power Requirements:

DC 7.2 V (Battery), DC 8.4 V (AC adaptor)

Power Consumption:

Rec. with LCD viewfinder only:

4.7 W

Rec. with LCD monitor only:

5.4 W

Rec. with LCD viewfinder and LCD monitor:

5.7 W

Playback on LCD:

4.1 W

Operating Temperature:

0 to 40 °C (32 to 104 °F)

Storage Temperature:

-20 to 60 °C (-4 to 140 °F)

Dimensions (W x H x D):

118 x 180 x 393 mm (4 3/4 x 7 1/8 x 15 1/2 inches) (camcorder only)

133 x 180 x 456 mm (5 1/4 x 7 1/8 x 18 inches) including microphone

Mass (camcorder only):

Approx. 1.6 kg (3 lb 6 oz)

CAMERA PARTS

Lens:

12:1 Variable Speed (1.2-22 sec.) zoom lens (48x digital zoom)
F = 6.0 to 72.0 mm; F1.6 to 2.4; Filter Diameter 58 mm

Focus:

Auto/Manual (ring)/Infinity/One push auto

Imaging Device:

Three 1/3-inch type CCDs
Gross 450,000 pixels/effective 400,000 pixels
Progressive/Interlace Scan

White Balance:

Auto/One-push/Outdoor (5800 K)/Indoor (3200 K)

Shutter Speed:

1/3, 1/6, 1/12, 1/25, 1/50, 1/60, 1/100, 1/120, 1/150, 1/215
1/300, 1/425, 1/600, 1/1000, 1/1250, 1/1750, 1/2500, 1/3500, 1/6000, 1/10000 second

Exposure:

Auto/Manual

Minimum Illumination:

1 lx with F1.6 at 18 dB gain

Horizontal Resolution:

530 TV lines

Viewfinder:

180,000 dot Black & White LCD

Horizontal Resolution:

500 TV lines

VTR PARTS

Audio Signal

Rec: 48 kHz/16-bit, 32 kHz/12-bit

Playback: 48 kHz/16-bit, 32 kHz/12-bit, 32 kHz/16-bit, 44.1 kHz/16-bit

Built-in Speaker:

Dynamic Speaker, ϕ 20 mm

LCD:

Hybrid, 2.5-inch type, 211,200 dots (960 x 220)

Tape Speed:

Approx. 28.2 mm/s (DVCAM mode)

Approx. 18.8 mm/s (DV SP mode)

Maximum Recording Time:

40 minutes (DVCAM mode)

60 minutes (DV SP mode, with

PDVM-40ME)

Video Signal:

CCIR Standard, PAL colour system

Connectors

Video IN/OUT

RCA pin: (1)

Luminance signal: 1 Vp-p, 75 Ω ,

unbalanced, sync negative

Audio IN/OUT

RCA pin: (2), 327 mV

Output impedance with less than 2.2 k Ω

Input impedance with more than 47 k Ω

S-Video IN/OUT

Mini-DIN 4 pin : (1)

Luminance signal: 1 Vp-p, 75 Ω ,

unbalanced

Chrominance signal: 0.3 Vp-p

Audio IN

XLR 3-pin female: (2), -60 dBu, 3 k Ω ,

+4 dBu, 10 k Ω (0 dBu = 0.775 V rms)

Digital input/output

i.LINK (DV): 4-pin (1)

Others

LANC: Stereo mini jack (2.5 mm): (1)

Headphone: Stereo mini jack (3.5 mm): (1)

External DC IN: (1) 8.4 V for AC-L15 AC

adaptor

DSR-2000AP DVCAM Editing Recorder

Features

- Playback capability of all DV (25 Mb/s) recorded tapes including DV tapes recorded in SP/LP mode and DVCPRO without any mechanical adaptor (SDTI(QSDI) and i.LINK(DV) do not support DVCPRO playback)
- Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette
- Preread editing capability^(*) to perform A/B roll editing^(*) with two VTRs, audio mix/swap and voice over with no delay between video and audio
- Audio cross-fade function
- Four-channel audio editing capability
- Excellent jog audio quality
- VTR-to-VTR editing without external controllers
- Wide range of digital slow speed from -1 to +1 times normal speed
- DMC (Dynamic Motion Control)
- High-speed picture search over a range of 60 times normal speed, in both forward and reverse
- Versatile digital interfaces: SDI, SDTI (QSDI), i.LINK (DV)(option), SDTI-CP (MPEG Out)(option) and AES/EBU digital audio
- Extensive analogue interfaces: composite, component, S-Video and XLR audio
- RS-422A remote control interface
- Frame accurate editing capability
- ClipLink operation
- Full tape dubbing with ClipLink Log Data via SDTI (QSDI) and RS-422A interfaces
- 16:9 aspect ID signal recording
- Process control for highly stable video signals
- TC and VITC
- Channel condition monitoring function
- Built-in signal generator
- Closed caption function

(*1) Not available through SDTI(QSDI) and i.LINK(DV) interfaces

(*2) MIX and WIPE only



Supplied Accessories

Operating Instructions (1)

AC Power cord (1)

Optional Accessories

DSBK-2020 HD Up-conversion Board

RMM-131 Rack Mount Kit

RCC-G Cables 9-pin/9-pin Cable

CCF-L Cables DV Cables (6-pin to 6-pin)

CCFD-L Cables DV Cables (6-pin to 4-pin)

PDV-N Digital Videocassette Tapes

(Non IC type)

PDV-MEM Digital Videocassette Tapes

(Master Tape)

PDV-ME Digital Videocassette Tapes

PDV-CL Video Head Cleaning Cassette

Tapes (for DVCAM)

Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

110 W

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Operating humidity:

Less than 80%

Storage humidity:

Less than 90%

Mass:

18 kg (39 lb 10 oz)

Dimensions:

427 (W) × 175 (H) × 496.5 (D) mm

(16 7/8 × 7 × 19 5/8 inches)

Tape speed:

28.221 mm/s

Recording/Playback time

Standard size: 184 min. with

PDV-184ME/184N/184MEM

Mini size: 40 min. with

PDVM-40ME/40N/40MEM

Fast forward/Rewind time:

Standard size: Less than 3 min. with

PDV-184ME/184N/184MEM

Mini size: Less than 1 min. with

PDVM-40ME/40N/40MEM

Search speed

Shuttle mode: Still to ±60 times normal speed in forward and reverse

Digital slow mode: ±1 times normal speed in forward and reverse

Video Performance

Band width (via analogue component I/O):

Luminance: 25 Hz to 5.5 MHz +1.0/-2.0 dB

5.75 MHz +0/-3.0 dB (Typical measurement)

Chrominance: 25 Hz to 2.0 MHz +1.0/-2.0 dB

S/N ratio (via analogue component I/O):

More than 55 dB

K-factor (K2T, KPB):

Less than 2.0%

Y/C delay:

Less than 30 ns

Audio Performance

Frequency response:

2CH mode (48 kHz/16-bit): 20 Hz to 20

kHz +0.5/-1.0 dB

4CH mode (32 kHz/12-bit): 20 Hz to 14.5

kHz +0.5/-1.0 dB

Dynamic range:

More than 90 dB

Distortion (THD + N):

Less than 0.05%

Input Signals

Video (Analogue)

REF. Video: BNC (2), loop-through connection

Composite, 1.0 Vp-p, 75 Ω, sync negative

Video: BNC (2), loop-through connection

Composite, 1.0 Vp-p, 75 Ω, sync negative

Component: BNC (3)

Y:1.0 Vp-p, 75 Ω, sync negative

R-Y:0.7 Vp-p, 75 Ω (100%)

B-Y:0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y:1.0 Vp-p, 75 Ω, sync negative

C:0.3 Vp-p, 75 Ω (at burst level)

Video (Digital)

SDI: BNC (2), active-through connection

Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1)

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-190 i.LINK/DV Input/Output Board IEEE1394

Audio (Analogue)

Audio: XLR 3-pin, female (4)

-6/0/+4 dBu, 600 Ω on/off/-60 dBu, high impedance

Audio (Digital)

AES/EBU: BNC (2), 75 Ω, unbalanced

Time Code:

BNC (1), 0.5 Vp-p to 18 Vp-p, 3 kΩ, unbalanced

Output Signals

Video (Analogue)

REF. Vide: BNC (1), 0.3 Vp-p, 75 Ω, sync negative

Video 1/2/3(SUPER): BNC (3)

Composite, 1.0 Vp-p, 75 Ω, sync negative

Component: BNC (3)

Y:1.0 Vp-p, 75 Ω, sync negative

R-Y:0.7 Vp-p, 75 Ω (100%)

B-Y:0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y:1.0 Vp-p, 75 Ω, sync negative

C:0.3 Vp-p, 75 Ω (at burst level)

Video (Digital)

SDI: BNC (3)

Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1)

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-190 i.LINK/DV Input/Output Board IEEE1394

Audio (Analogue)

Audio: XLR 3-pin, male (4)

+4/0/-6 dBu (selectable by menu)

Monitor: RCA (1)

-11 dBu, 47 kΩ, unbalanced (-18 dBFS)

Headphone:JM-60 headphone jack (1)

-∞ to -13 dBu, 8 Ω, unbalanced (-18 dBFS)

Audio (Digital)

AES/EBU: BNC (2), 75 Ω, unbalanced

Time Code

BNC: (1), 2.2 Vp-p, 75 Ω, unbalanced

Remote

RS-422A: D-sub 9-pin, female (2)

Video Control: D-sub 15-pin, male (1)

Control Panel: D-sub 15-pin, female (1)

DSR-1800AP DVCAM Editing Recorder

Features

- Superb picture quality of the DVCAM format •Playback capability of DV (25 Mb/s) recorded tapes including DV tapes recorded in SP mode and DVCPRO tapes without a mechanical adaptor(SDTI (QSDI) and i.LINK (DV) interfaces do not support DVCPRO playback.) •Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette
- Preread playback capability to perform audio mix/swap and over dubbing without any delay between video and audio signals •Four-channel audio editing capability
- Audio cross-fade function •Excellent jog audio capability
- DMC (Dynamic Motion Control) •Digital slow speed from -0.5 to +0.5 times normal speed •High-speed picture search over a range of 60 times normal speed, in both forward and reverse •Versatile digital interfaces (The optional boards are required): SDI , SDTI(QSDI), i.LINK (DV) and AES/EBU digital audio. •Extensive analogue interfaces: composite, component, S-Video and XLR audio •RS-422A remote control interface •Frame accurate editing capability •ClipLink operation •Full tape dubbing with ClipLink Log Data •16:9 aspect ID signal recording
- Video process control of analogue and digital outputs
- TC and VITC •Channel condition monitoring function
- Built-in signal generator •Flexible input selection between video and audio* •Universal powering system (AC 100 V to 240 V) •Three-size cassette compartment to ensure compatibility with DV(25Mb/s) recorded tapes of all size and types •Closed caption function

* i.LINK cannot be combined with other signal interfaces.

Supplied Accessories

AC Power cord (1)

Operating instructions (1)

Optional Accessories

DSBK-1801 SDI, AES/EBU Input/Output Board

DSBK-1820 HD Up-conversion Board

RMM-131 Rack Mount Kit

RCC-G Cables 9-pin/9-pin Cable

CCF-L Cables DV Cables (6-pin to 6-pin)

CCFD-L Cables DV Cables (6-pin to 4-pin)

PDV-CL Video Head Cleaning Cassette Tapes

(for DVCAM)

PDV-MEM Digital Videocassette Tapes

(Master Tape)

PDV-N Digital Videocassette Tapes

(Non IC type)

PDV-ME Digital Videocassette Tapes



Specifications

GENERAL

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

100 W (with all options)

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Operating humidity:

Less than 80%

Storage humidity:

Less than 90%

Weight:

13 kg (28 lb 10 oz)

Dimensions (W x H x D):

427 x 174 x 400 mm (16 7/8 x 6 7/8 x 15 3/4 inches)

Tape speed:

28.221 mm/s

Recording/Playback time

Standard size: 184 min. with

PDV-184ME/184N/184MEM

Mini size: 40 min. with

PDVM-40ME/40N/40MEM

Fast forward/Rewind time

Standard size: Less than 3 min. with

PDV-184ME/184N/184MEM

Mini size: Less than 1 min. with

PDVM-40ME/40N/40MEM

Search speed

Shuttle mode: Still to ± 60 times normal speed

Digital slow mode: ± 0.5 times normal speed

VIDEO PERFORMANCE

Bandwidth (via analogue component I/O)

Luminance: 25 Hz to 5.0 MHz ± 1.0 dB

Chrominance: 25 Hz to 2.0 MHz $\pm 1.0/-2.0$ dB

S/N ratio (via analogue component I/O):

More than 55 dB

K-factor (K2T, KPB):

Less than 2%

Y/C delay:

Less than 30 ns

AUDIO PERFORMANCE

Frequency response

2CH mode (48 kHz/16-bit): 20 Hz to 20 kHz $\pm 0.5/-1.0$ dB

4CH mode (32 kHz/12-bit): 20 Hz to 14.5 kHz $\pm 0.5/-1.0$ dB

Dynamic range:

More than 90 dB

Distortion (THD + N):

Less than 0.05%

INPUT SIGNALS

VIDEO (ANALOGUE)

REF. Video :BNC (2), loop-through connection

0.3 Vp-p, 75 Ω , sync negative

Composite Video: BNC (2), loop-through connection

1.0 Vp-p, 75 Ω , sync negative

Component :BNC (3)

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (2), active-through connection

*using optional DSBK-1801

Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1) *using optional

DSBK-1802

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-1803

IEEE 1394

AUDIO (ANALOGUE)

Audio: XLR 3-pin, female (4)

-6/-3/0/+4 dBu (selectable by menu)

-60 dBu (high impedance)/600 Ω

OFF/ON

AUDIO (DIGITAL)

AES/EBU :BNC (2) *using optional

DSBK-1801

75 Ω , unbalanced

TIME CODE

BNC (1): 0.5 Vp-p to 18 Vp-p, 3 k Ω unbalanced

OUTPUT SIGNALS

VIDEO (ANALOGUE)

REF. Video: BNC (1)

0.3 Vp-p, 75 Ω , sync negative

Video 1/2(SUPER): BNC (2)

Composite, 1.0 Vp-p, 75 Ω , sync negative

Component :BNC (3)

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (2) *using optional DSBK-1801
Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656

SDTI (QSDI) :BNC (1) *using optional

DSBK-1802

Conforms to SDTI (270 Mb/s), SMPTE 305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-1803

IEEE 1394

AUDIO (ANALOGUE)

Audio : XLR 3-pin,male (4)

-6/-3/0/+4 dBu (selectable by menu)

Monitor: RCA (1)

-9 dBu, 47 k Ω , unbalanced (-18 dBFS)

Headphone: JM-60 headphone jack (1)

$-\infty$ to -11 dBu, 8 Ω , unbalanced (-18 dBFS)

AUDIO (DIGITAL)

AES/EBU: BNC (2) *using optional

DSBK-1801

75 Ω , unbalanced

TIME CODE

BNC(1), 2.2 Vp-p, 75 Ω , unbalanced

REMOTE

RS-422A: D-sub 9-pin, female (1)

Video Control: D-sub 15-pin, male (1)

CONTROL S (SIRCS): Stereo mini jack (1)

DSR-1600AP DVCAM Editing Player

Features

- Superb picture quality of the DVCAM format
- Playback capability of DV (25 Mb/s) recorded tapes including DV tapes recorded in SP mode and DVCPRO tapes without a mechanical adaptor (SDTI (QSDI) and i.LINK (DV) interfaces do not support DVCPRO playback)
- Excellent jog audio capability
- DMC (Dynamic Motion Control)
- Wide range of digital slow speed from -0.5 to +0.5 times normal speed
- High-speed picture search over a range of 60 times normal speed, in both forward and reverse
- Versatile digital interfaces (The optional boards are required) : SDI, SDTI(QSDI), i.LINK(DV) and AES/EBU digital audio
- Extensive analogue interfaces: composite, component, S-Video and XLR audio
- RS-422A remote control interface
- Frame accurate editing capability
- ClipLink operation
- Video process control for greater control of both analogue and digital outputs
- TC and VITC
- Channel condition monitoring function
- Universal powering system (AC 100 V to 240 V)
- Three-size cassette compartment to ensure compatibility with DV(25Mb/s) recorded tapes of all size and types
- Closed caption function
- Jog dial on front panel



Supplied Accessories

- AC power cord (1)
- Operating instructions (1)

Optional Accessories

- DSBK-1820 HD Up-conversion Board
- DSBK-1601 SDI, AES/EBU Output Board
- RMM-131 Rack Mount Kit
- RCC-G Cables 9-pin/9-pin Cable
- CCF-L Cables DV Cables (6-pin to 6-pin)
- CCFD-L Cables DV Cables (6-pin to 4-pin)
- PDV-N Digital Videocassette Tapes (Non IC type)
- PDV-MEM Digital Videocassette Tapes (Master Tape)
- PDV-ME Digital Videocassette Tapes
- PDV-CL Video Head Cleaning Cassette Tapes (for DVCAM)

Specifications

GENERAL

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

70 W (with all options)

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Operating humidity:

Less than 80%

Storage humidity:

Less than 90%

Weight:

13 kg (28 lb 10 oz)

Dimensions (W x H x D):

427 x 174 x 400 mm (16 7/8 x 6 7/8 x 15 3/4 inches)

Tape speed:

28.221 mm/s

Recording/Playback time

Standard size: 184 min. with

PDV-184ME/184N/184MEM

Mini size: 40 min. with

PDVM-40ME/40N/40MEM

Fast forward/Rewind time

Standard size: Less than 3 min. with

PDV-184ME/184N/184MEM

Mini size: Less than 1 min. with

PDVM-40ME/40N/40MEM

Search speed

Shuttle mode: Still to ± 60 times normal speed

Digital slow mode: ± 0.5 times normal speed

VIDEO PERFORMANCE

Bandwidth (via analogue component I/O)

Luminance: 25 Hz to 5.0 MHz ± 1.0 dB

Chrominance: 25 Hz to 2.0 MHz $+1.0/-2.0$ dB

S/N ratio (via analogue component I/O):

More than 55 dB

K-factor (K2T, KPB):

Less than 2%

Y/C delay:

Less than 30 ns

AUDIO PERFORMANCE

Frequency response

2CH mode (48 kHz/16-bit): 20 Hz to

20 kHz $+0.5/-1.0$ dB

4CH mode (32 kHz/12-bit): 20 Hz to

14.5 kHz $+0.5/-1.0$ dB

Dynamic range:

More than 90 dB

Distortion (THD + N):

Less than 0.05%

INPUT SIGNALS

VIDEO (ANALOGUE)

REF. Video: BNC (2), loop-through connection

0.3 Vp-p, 75 Ω , sync negative

OUTPUT SIGNALS

VIDEO (ANALOGUE)

REF. Video: BNC (1)

0.3 Vp-p, 75 Ω , sync negative

Composite Video 1/2(SUPER): BNC (2)

1.0 Vp-p, 75 Ω , sync negative

Component: BNC (3)

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: DIN 4-pin (1)

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI :BNC(2) *using optional DSBK-1601

Conforms to Serial Digital Interface

(270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1) *using optional

DSBK-1602

Conforms to SDTI (270 Mb/s), SMPTE

305M/322M

i.LINK (DV): 6-pin (1) *using optional

DSBK-1803

IEEE 1394

AUDIO (ANALOGUE)

Audio: XLR 3-pin, male (4)

-6/-3/0/+4 dBu (selectable by menu)

Monitor: RCA (1)

-9 dBu, 47 k Ω , unbalanced (-18 dBFS)

Headphone: JM-60 headphone jack (1)

$-\infty$ to -11 dBu, 8 Ω , unbalanced

(-18 dBFS)

AUDIO (DIGITAL)

AES/EBU: BNC(2) *using optional

DSBK-1601

75 Ω , unbalanced

TIME CODE:

BNC (1): 2.2 Vp-p, 75 Ω , unbalanced

REMOTE

RS-422A: D-sub 9-pin, female (1)

Video Control: D-sub 15-pin, male (1)

CONTROL S (SIRCS): Stereo mini jack (1)

DSR-1500AP DVCAM Editing Recorder

Features

- Compact, half-rack size
- Superb picture quality of the DVCAM format
- Playback compatibility with DV (25 Mb/s) family formats including consumer DV (SP mode) and DVCPRO without a mechanical adaptor(*)
- DV format recording capability (SP mode, 10-µm track pitch recording) (**)
- Long recording time: max. 184 min (DVCAM mode)/276 min (DV SP mode) with a standard-size cassette, and max. 40 min (DVCAM mode)/60 min (DV SP mode) with a mini cassette
- Versatile digital interfaces: equipped with i.LINK (DV), and optional SDI, SDTI (QSDI) and AES/EBU interfaces
- Extensive range of analogue interfaces: composite, component, S-video and two channels of XLR audio
- Variable speed playback within the range of -0.5 to +0.5 times normal play speed
- High-speed colour picture search: 60 times normal play speed in both forward and reverse
- Menu keys on front panel for frame by frame picture search
- RS-422A remote control interface
- Excellent jog audio quality
- ClipLink operation
- Full tape dubbing including ClipLink Log Data using SDTI (QSDI) and RS-422A interfaces
- 16:9 aspect ID signal recording
- Video process control for both analogue and digital outputs
- TC and VITC
- Built-in signal generator
- Universal powering system: allows the use of AC100 V to 240 V power sources
- Three-size cassette compartment to ensure compatibility with DV(25Mb/s) recorded tapes of all size and types
- Closed caption function

(*) SDTI (QSDI) interface does not support DVCPRO playback. (**) Assemble or insert editing is not possible.



Supplied Accessories

- AC Power cord (1)
- Operating instructions (1)

Optional Accessories

- DSBK-1501 Digital Input/Output Board
- DSBK-1505 Analogue Input Board
- DSRM-10 Remote Control Unit
- RCC-G Cables 9-pin/9-pin Cable
- CCF-L Cables DV Cables (6-pin to 6-pin)
- CCFD-L Cables DV Cables (6-pin to 4-pin)
- PDV-MEM Digital Videocassette Tapes (Master Tape)
- PDV-N Digital Videocassette Tapes (Non IC type)
- PDV-CL Video Head Cleaning Cassette Tapes (for DVCAM)
- PDV-ME Digital Videocassette Tapes

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

55 W (with all options)

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to 60 °C (-4 °F to 140 °F)

Operating humidity:

Less than 80%

Storage humidity:

Less than 90%

Mass:

6 kg (13 lb 3 oz)

Dimensions (W x H x D):

210 x 130 x 420 mm (8 3/8 x 5 1/8 x 16 5/8 inches)

Tape speed:

28.221 mm/s

Recording/Playback time

DVCAM mode:

Standard size: 184 min. with

PDV-184ME/184N/184MEM

Mini size: 40 min. with

PDVM-40ME/40N/40MEM

DV (SP) mode:

Standard size: 276 min. with

PDV-184ME/184N/184MEM

Mini size: 60 min. with

PDVM-40ME/40N/40MEM

Fast forward/Rewind time

Standard size: Less than 3 min. with

PDV-184ME/184N/184MEM

Mini size: Less than 1 min. with

PDVM-40ME/40N/40MEM

Search speed

Shuttle mode: Still to ± 60 times normal speed

Digital slow mode: ± 0.5 times normal speed

Video Performance

Bandwidth (via analogue component I/O)

Luminance: 25 Hz to 5.0 MHz +1.0/-1.5 dB

Chrominance: 25 Hz to 2.0 MHz +1.0/-2.0 dB

S/N ratio (via analogue component I/O):

More than 55 dB

K-factor (K2T, KPb):

Less than 2%

Y/C delay:

Less than 30 ns

Audio Performance

Frequency response

2CH mode (48 kHz/16-bit): 20 Hz to 20 kHz

± 1.0 dB

4CH mode (32 kHz/12-bit): 20 Hz to 14.5 kHz

± 1.0 dB

Dynamic range:

More than 87 dB

Distortion (THD + N):

Less than 0.07%

Input Signals

VIDEO (ANALOGUE)

REF. Video: BNC (2), loop-through connection

0.3 Vp-p, 75 Ω sync negative

Composite Video: BNC (2), loop-through

connection(*1) *Using optional DSBK-1504

1.0 Vp-p, 75 Ω , sync negative

Component: BNC (3) (*1) *Using optional

DSBK-1504

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: BNC (2) (*1) *Using optional

DSBK-1504

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (1) (*2) *Using optional DSBK-1501

Conforms to Serial Digital Interface

(270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (1) (*2) *using optional

DSBK-1501

Conforms to SDTI (270 Mb/s), SMPTE

305M/322M

i.LINK (DV): 6-pin (1)

IEEE 1394-based

AUDIO (ANALOGUE)

Audio: XLR 3-pin female (2) *Using optional

DSBK-1504

-6/-3/0/+4 dBu (selectable by menu), high

impedance

AUDIO (DIGITAL)

AES/EBU: BNC (2) *Using optional DSBK-1501

75 Ω , unbalanced

Time Code

BNC (1), 0.5 Vp-p to 18.0 Vp-p, 3 k Ω

unbalanced

Output Signals

VIDEO (ANALOGUE)

Video 1/2/3(SUPER): BNC (3) (*3)

Composite, 1.0 Vp-p, 75 Ω , sync negative

Component: BNC (3) (*3)

Y: 1.0 Vp-p, 75 Ω , sync negative

R-Y: 0.7 Vp-p, 75 Ω (100%)

B-Y: 0.7 Vp-p, 75 Ω (100%)

S-Video: BNC (2) (*3)

Y: 1.0 Vp-p, 75 Ω , sync negative

C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

SDI: BNC (2) (*4) *Using optional DSBK-1501

Conforms to Serial Digital Interface

(270 Mb/s), ITU-R BT.656

SDTI (QSDI): BNC (2) (*4) *Using optional

DSBK-1501

Conforms to SDTI (270 Mb/s), SMPTE

305M/322M

i.LINK (DV): 6-pin (1)

IEEE 1394-based

AUDIO (ANALOGUE)

Audio: XLR 3-pin male (2)

-6/-3/0/+4 dBu (selectable by menu)

Monitor: RCA (1) (*5)

- ∞ to -9 dBu, 47k Ω , unbalanced

(-18 dBFS)

Headphone: JM-60 headphone jack (1)

- ∞ to -11 dBu, 8 Ω , unbalanced (-18 dBFS)

AUDIO (DIGITAL):

BNC (2), AES/EBU, 75 Ω , unbalanced *Using

optional DSBK-1501

TIME CODE:

BNC (1), 2.2 Vp-p, 75 Ω , unbalanced

REMOTE

RS-422A: D-sub 9-pin, female (1)

Control-S (SIRCS): Stereo mini jack (1)

(*1): Video, Component and S-Video inputs share the same BNC connectors. (*2): SDI and SDTI (QSDI) inputs share the same BNC connectors. (*3): Video, Component and S-Video outputs share the same BNC connectors. (*4): SDI and SDTI (QSDI) outputs share the same BNC connectors. (*5): The volume of monitor can be controlled by the PHONE LEVEL control knob.

DSR-45AP DVCAM Recorder

Features

- Superb picture quality of the DVCAM format
- Recording and playback capability of the DV format (SP mode only)^(*)
- Long recording time: up to 184 minutes with a standard-size cassette, 40 minutes with a mini-size cassette in DVCAM mode
- Full range of analogue Video IN/OUT: component, composite, S-video
- Four channel independent Audio In/OUT with XLR connectors for Audio OUT
- i.LINK(DV) interface for simultaneous transfer of audio, video, and command signals
- RS-422A remote control interface^(*)
- RS-232C interface for basic control from a PC
- LANC and Control S interface
- Time code IN/OUT
- Time code/User bit preset
- Time code IN through DV IN
- Duplication function (Including the duplication of cassette memory data)
- Compact size (half-rack size width, 2U height)
- Low power consumption (22 W during playback)
- Built-in 2.5-inch type colour LCD monitor
- Tape counter
- Wireless remote controller RMT-DS5 supplied

(*) When recording in DV(SP) format, the transition between cut to cut may not be smooth. In addition, when the recording format is switched between DVCAM and DV, the transition may not be recorded smoothly. (*) The DSR-45/45P is not equipped with the synchronization capability, therefore, is recommended to be used only as a source feeder in A/B roll editing.



Supplied Accessories

Cleaning cassette (1)
RMT-DS5 wireless remote controller (1)
Size AA (R6) battery for remote controller (2)
Operating instructions (1)
Interface manual for programmers (RS-232C) (1)
AC power cord (1)

Optional Accessories

VMC-IL44 cables 4-pin <-> 4-pin i.LINK Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
DSRM-10 Remote Control Unit

Specifications

General

System
PAL
Power requirements:
AC 100 V to 240 V, 50/60 Hz
Power consumption:
22 W
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to 60 °C (-4 °F to 140 °F)
Mass:
Approx. 4.6 kg (10 lb 2 oz)
Dimensions:
212 (W) × 98 (H) × 392.8 (D) mm
(8 3/8 × 3 7/8 × 15 1/2 inches)
Tape speed
DVCAM mode: 28.2 mm/s
DV SP playback mode: 18.8 mm/s
Recording/Playback time in DVCAM mode:
Standard size: 184 min. with PDV-184ME/184N/184MEM
Mini size: 40 min. with PDVM-40ME/40N/40MEM

Tape rewind time:

Less than 2 min. with PDV-184ME/184N/184MEM
Search speed (via DSRM-20 or RMT-DS5):
± x1/10, x1/3, x1, x2, x11, x17 (DVCAM)
± x1/10, x1/3, x1, x2, x11, x24 (DV SP)

Signal Inputs

Video (Analogue)
Ref.Video: BNC (1)
Black burst: 75 Ω, sync negative
Composite: BNC (1)(*)
1.0 Vp-p, 75 Ω, unbalanced, sync negative
S-Video: Mini DIN 4-pin (1)
Y: 1.0 Vp-p, 75 Ω, sync negative
C: 0.3 Vp-p (subcarrier), 75 Ω
Component: BNC (3)
Y: 1.0 Vp-p, 75 Ω, sync negative
R-Y/B-Y: 0.7 Vp-p (with 100% colour bar)

Audio (Analogue)

Audio: Pin jack (4)
-10/-2/+4 dBu (full bits -18 dB)

Signal outputs

Video (Analogue)
Composite: BNC (1)
1.0 Vp-p, 75 Ω, unbalanced, sync negative
S-Video: Mini DIN 4-pin (1)
Y: 1.0 Vp-p, 75 Ω, unbalanced, sync negative
C: 0.3 Vp-p (subcarrier), 75 Ω, unbalanced
Component: BNC (3)
Y: 1.0 Vp-p, 75 Ω, sync negative
R-Y/B-Y: 0.7 Vp-p (with 100% colour bar)
Monitor: Pin jack (1)
Composite, 1.0 Vp-p, 75 Ω, sync negative

Audio (Analogue)

Audio: XLR 3-pin male (4)
+4 dBu (full bits -20dB)(*)
Monitor: Pin jack (1)
2 Vrms (maximum)
Digital Input/Output
i.LINK (DV): 4-pin (1), IEEE1394
Others
RS-422A: D-sub 9-pin, female (1)
RS-232C: D-sub 9-pin, male (1)
LANC: Stereo mini-mini jack (1)
Control S (SIRCS) IN: Stereo mini jack (1)
Headphone: Stereo mini jack (1)

(*) Shared with REF IN (*) The audio output level of the DSR-45 will be reduced by half when connected to an Unbalanced XLR input device.

DSR-11 DVCAM Recorder

Features

- Superb picture quality of the DVCAM format
- Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette
- Recording and playback of DV format tapes (SP mode only)
- NTSC/PAL compatible^(*)
- Composite and S Video inputs
- i.LINK (DV) interface providing a single cable connection to simultaneously transfer audio, video and command signals
- Unique design enables both horizontal and vertical installation
- LANC and Control S terminals
- Auto repeat function
- DC power operation
- Supplied RMT-DS11 Wireless Remote Commander

^(*) The DSR-11 does not convert signals from NTSC to PAL, or vice versa.



Supplied Accessories

- AC Adaptor (1)
- Power Cord (1)
- RMT-DS11 Wireless Remote Commander (1)
- Size AA(R6) Batteries for Remote (2)
- Stand (1)
- Cleaning Cassette (1)
- Operation Manual (1)

Optional Accessories

- DSRM-10 Remote Control Unit
- CCFD-L Cables DV Cables (6-pin to 4-pin)
- VMC-IL44 cables 4-pin <-> 4-pin i.LINK Cable
- VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable

Specifications

General

- System:
 - NTSC/PAL switchable
- DC input:
 - DC jack type 4 x 1 (12 V)
- Power consumption:
 - 15 W
- Operating temperature:
 - 5 to 40 °C (41 to 104 °F)
- Storage temperature:
 - 20 to 60 °C (-4 to 140 °F)
- Tape speed:
 - 28.221 mm/s (DVCAM mode), 18.831 mm/s (DV SP mode)
- Recording/Playback time:
 - 184 minutes (DVCAM mode),
 - 270 minutes (DV SP mode) with PDV-184ME cassette
 - 40 minutes (DVCAM mode),
 - 60 minutes (DV SP mode) with PDVM-40ME cassette
- Mass Dimensions Video:
 - 2.8 kg (6 lb 2 oz)
 - 180 (W) x 69 (H) x 258.4 (D) mm
 - (7 1/8 x 2 3/4 x 10 1/4 inches), excluding projections

Video

- Rec Mode:
 - DVCAM/DV (SP mode only)
- PB Mode:
 - DVCAM/DV (SP mode only)

Audio

- Rec Mode:
 - 48 kHz: 16 bit: 2ch/32 kHz:12 bit: 4ch/automatic (DV IN)
- PB Mode:
 - 48 kHz: 16 bit: 2ch/32 kHz:12 bit: 4ch/32 kHz:16 bit: 2ch
 - 44.1kHz:16 bit: 2ch (automatically selected)

Input/Output connectors

Video IN

- Composite: RCA pin
 - 1.0 Vp-p, 75 Ω , Sync negative
- S Video: 4-pin mini DIN
 - Y: 1.0 Vp-p, 75 Ω , Sync negative
 - C: 0.286 Vp-p (NTSC) 0.3 Vp-p (PAL) (subcarrier burst), 75 Ω

Audio IN:

- RCA pin x 2 (L, R)
 - Input level: 2 V rms (full bit) Input
 - impedance: more than 47 k Ω

Video OUT

- Composite: RCA pin
 - 1.0 Vp-p, 75 Ω , Sync negative
- S Video: 4-pin mini DIN
 - Y: 1.0 Vp-p, 75 Ω , Sync negative
 - C: 0.286 Vp-p (NTSC) 0.3 Vp-p (PAL) (subcarrier burst), 75 Ω

Audio OUT:

- RCA pin x 2 (L, R)
 - Output level: 2 V rms (full bit) Output
 - impedance: less than 10 k Ω

DV IN/OUT:

- 4-pin
- Control S:
 - Stereo mini jack
- LANC:
 - Stereo minimini jack

DSR-50P DVCAM Portable Recorder

Features

- Superb picture quality of the DVCAM format
- Playback and Recording capability of DV recorded tapes (SP mode only)
- Long recording time: up to 184 minutes with a standard-size cassette and 40 minutes with a mini-size cassette
- Four-channel independent digital audio recording
- 2.5-inch (200,000 dot) colour LCD monitor
- Duplication options (tape copy, tape copy with original time code, or tape copy with cassette memory data)
- Compact & lightweight design: 3.9 kg (8 lb 9 oz) without battery and tape
- Playback capability of both NTSC and PAL recorded tapes(*)
- i.LINK (DV) interface providing a single cable connection to simultaneously transfer audio, video and command signals
- 26-pin Camera Connector
- Analogue Component Output
- Timecode IN/OUT

(*) The output signal level is not standard and therefore recommended for simple monitoring only, with a monitor of the same colour system as the original source.



Supplied Accessories

- LCD Protection Cover (1)
- Cleaning Cassette (1)

Optional Accessories

- BC-M150 Ni-NH & Li-ion Battery Charger
- BC-L70 Li-ion Battery Charger
- BP-L60S Rechargeable Lithium-ion Battery Pack
- DSRM-10 Remote Control Unit
- FS-20 Foot switch
- VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
- VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
- CCF-L Cables DV Cables (6-pin to 6-pin)
- CCFD-L Cables DV Cables (6-pin to 4-pin)

Specifications

General

- DC input
 - XLR 4-pin (male), +12 V
- Power consumption
 - 15 W
- Operating temperature
 - 5 to 40 °C (41 to 104 °F)
- Storage temperature
 - 20 to 60 °C (-4 to 140 °F)
- Tape speed
 - Approx. 28.2 mm/sec (DVCAM mode),
 - Approx. 18.8 mm/sec (DV SP mode)

Recording/Playback time

- 184 minutes (DVCAM mode), 270 minutes (DV SP mode) with PDV-184ME cassette
- 40 minutes (DVCAM mode), 60 minutes (DV SP mode) with PDVM-40ME cassette

Mass

- 3.9 kg (8 lb 9 oz), excluding battery and tape

Dimensions

- 247 (W) x 92.5 (H) x 311 (D) mm (9 3/4 x 3 3/4 x 12 1/4 inches), excluding projections
- 279 (W) x 99 (H) x 315 (D) mm (11 x 4 x 12 1/2 inches), including projections

Video Performance

Rec mode

- DVCAM/DV (SP mode only)

PB mode

- DVCAM/DV (SP mode only)

Audio Performance

Rec mode

- 48.0 kHz: 16 bit: 2ch / 32.0 kHz: 12 bit: 4ch / automatic (DV IN)

PB mode

- 48.0 kHz: 16 bit: 2ch / 32.0 kHz: 12 bit: 4ch /
- 32.0 kHz: 16 bit: 2ch / 44.1 kHz: 16 bit: 2ch (automatically selected)

Input terminals

Video (Analogue)

- Reference: BNC (1), Black Burst 75 Ω , Sync negative (use Video IN)
- Composite Video: BNC (1), 1.0 Vp-p, 75 Ω , Sync negative
- S-Video: 4-pin mini DIN (1)
- Y: 1.0 Vp-p, 75 Ω , Sync negative
- C: 0.3 Vp-p (subcarrier burst) 75 Ω

Audio IN (Analogue)

- Audio: XLR 3-pin, female (4)
- (+4 dBu/-20 dBu/-60 dBu), impedance more than 3 k Ω
- with +48 V phantom power supply (independently switched for each channel)

Camera IN:

- 26-pin camera connector (1)
- Composite: 1.0 Vp-p, 75 Ω , Sync negative
- Component
- Y: 1.0 Vp-p, 75 Ω , Sync negative
- B-Y: 0.7 Vp-p, 75 Ω , R-Y: 0.7 Vp-p, 75 Ω

DV:

- 6-pin (with lock) *shared with DV OUT connector

Timecode:

- BNC (1), 0.5 to 18 Vp-p

Output terminals

Video (Analogue)

- Video OUT 1 (Monitor): Composite, BNC (1)
- 1.0 Vp-p, 75 Ω , Sync negative
- Superimpose On/Off

Video OUT 2: Composite, BNC (1)

- 1.0 Vp-p, 75 Ω , Sync negative
- S-Video, 4-pin mini DIN (1)
- Y: 1.0 Vp-p, 75 Ω , Sync negative
- C: 0.3 Vp-p (subcarrier burst) 75 Ω

Component OUT: BNC (3)

- Y: 1.0 Vp-p, 75 Ω , Sync negative
- B-Y/R-Y: 0.7 Vp-p, 75 Ω

Audio (Analogue)

- RCA pin: (4), -10 dBu, Standard output level -18 dB from full bit
- RCA pin (Monitor): (1)

DV:

- 6-pin (with lock) *shared with DV IN connector

Timecode:

- BNC (1), 2.2 Vp-p, 600 ohms / 1.2 Vp-p, 75 Ω

Remote

- Control S: Stereo mini jack (1)
- Remote: Stereo mini jack (1) (Edge High / Edge Low / Level High / Level Low) (Tally)
- Control: Stereo minimini jack (compatible with LANC as a player)
- Headphone jack (left side): Stereo standard jack (1)
- 19 dBu, with Level Control

Other

- Colour LCD monitor: 2.5 inch, 200,000 dots

DSR-DR1000AP Video Disc Recorder

Features

- Hard disc recorder (160 GB) with 3.5-inch large-capacity hard drive
- Up to 12 hours of 25 Mb/s DVCAM/DV video and audio recording
- Compact and lightweight (210 x 130 x 422 mm/ 8 3/8 x 5 1/8 x 16 5/8 inches, 7.5 kg/ 16 lb 10 oz)
- Simultaneous recording and playback capability
- Variable speed playback within a wide range of -2 to +2 times normal speed
- Smooth jog sound capability for easy designation of editing points
- Clip segment playback for continuous playback of designated video segments
- Continuous loop recording allows recording to continue until stopped by operator
- Interval recording to produce recordings over extended periods
- Pre-alarm recording automatically triggers recording to start when an external alarm signal is detected
- VTR-like control panel with Jog/Shuttle dial
- Random access to files
- Synchronous playback via RS-422A
- Versatile interfaces
- i.LINK interface (6-pin) with AV/C and SBP2 protocols
- High-speed file transfer via i.LINK interface using SBP2 protocol
- File transfer of DV video and audio using FTP



Supplied Accessories

- AC power cord (1)
- RM-LG2 (remote control unit) (1)
- Operation manual (1)
- Warranty card (1)

Optional Accessories

- RCC-G Cables 9-pin/9-pin Cable
- CCF-L Cables DV Cables (6-pin to 6-pin)
- CCFD-L Cables DV Cables (6-pin to 4-pin)

Specifications

General

- Power requirements:
AC 100 V to 240 V, 50/60 Hz
- Power consumption:
75 W
- Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
- Storage temperature:
-20 °C to 60 °C (-4 °F to 140 °F)
- Operating humidity:
Less than 80%
- Storage humidity:
Less than 90%
- Mass:
7.5 kg (16 lb 10 oz)
- Dimensions (W x H x D):
210 x 130 x 422 mm (8 3/8 x 5 1/8 x 16 5/8 inches, without projection)

Video Performance

- Bandwidth (via analogue component I/O)
Luminance: 25 Hz to 5.0 MHz +1.0
- Chrominance: 25 Hz to 2.0 MHz +1.0/-2.0 dB
- S/N ratio (via analogue component I/O):
More than 54 dB
- K-factor (K2T, KPB):
Less than 2%
- Y/C delay:
Less than 30 ns

Audio Performance

- Frequency response
2CH mode (48 kHz/16-bit): 20 Hz to 20 kHz
±1.0 dB
4CH mode (32 kHz/12-bit): 20 Hz to 14.5 kHz
±1.0 dB
- Dynamic range:
More than 87 dB
- Distortion (THD + N):
Less than 0.07% (48 kHz)

Input Signals

- VIDEO (ANALOGUE)
REF. Video: BNC (2)
0.3 Vp-p, 75 Ω sync negative
Composite Video: BNC (2), loop-through connector (*1)
1.0 Vp-p, 75 Ω, sync negative
Component: BNC (3) (*1)
Y: 1.0 Vp-p, 75 Ω, sync negative
R-Y, B-Y: 0.7 Vp-p, 75 Ω (100% colour bar)
- S-Video: BNC (2) (*1)
Y: 1.0 Vp-p, 75 Ω, sync negative
C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

- SDI: BNC (1)
Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656
- i.LINK (DV): 6-pin (1)
IEEE 1394-based

AUDIO (ANALOGUE)

- Audio: XLR 3-pin female (2)
-6/-3/0/+4 dBu (selectable by menu), high impedance

AUDIO (DIGITAL)

- AES/EBU: BNC (2)
75 Ω, unbalanced

Time Code

- BNC (1), 0.5 Vp-p to 18.0 Vp-p, 3 kΩ unbalanced

Output Signals

VIDEO (ANALOGUE)

- Video 1/2 (SUPER): BNC (2) (*2)
- Composite, 1.0 Vp-p, 75 Ω, sync negative
- Component: BNC (3) (*2)
Y: 1.0 Vp-p, 75 Ω, sync negative
R-Y, B-Y: 0.7 Vp-p, 75 Ω (100% colour bar)
- S-Video: BNC (2) (*2)
Y: 1.0 Vp-p, 75 Ω, sync negative
C: 0.3 Vp-p, 75 Ω (at burst level)

VIDEO (DIGITAL)

- SDI: BNC (2)
Conforms to Serial Digital Interface (270 Mb/s), ITU-R BT.656
- i.LINK (DV): 6-pin (1)
IEEE 1394-based

AUDIO (ANALOGUE)

- Audio: XLR 3-pin male (2)
-6/-3/0/+4 dBu (selectable by menu)
- Monitor: RCA (1)
∞ to -9 dBu, 47 kΩ, unbalanced (-18 dBFS), volume center
- Headphone: JM-60 headphone jack (1)
∞ to -11 dBu, 8 Ω, unbalanced (-18 dBFS)

AUDIO (DIGITAL):

- AES/EBU: BNC (2), 75 Ω, unbalanced

TIME CODE:

- BNC (1), 2.2 Vp-p, 600 Ω, unbalanced

REMOTE

- RS-422A: D-sub 9-pin, female (2)
- Control: Mini jack (1)

Network

- Ethernet (1): 10Base-T/100Base-TX Ethernet, RJ-45 modular jack

(*1) Composite, Component and S-Video inputs share the same BNC connectors. (*2) Composite, Component and S-Video outputs share the same BNC connectors.

DVStation Networked Video Production System

Features

DVStation is video production and library system for DV and DVCAM users.

The central part of the DVStation system is DVStation Server (DVSTATION-CORE). The server provides central storage for AV files and operates a full content management system. DV25 based content is simply ingest and logged into DVStation from either a tape or XDCAM upload. Up to 25 browse users can then concurrently search for and review library clips. Chosen clips can be then opened in a choice of target non-linear editing tools-such as Sony Vegas, Pinnacle Liquid Edition or Apple Final Cut Pro



Supplied Accessories

- Ingest Client License (1)
- Browse Client License (5)
- Ingest User Manual (1)
- Browse User Manual (1)
- Web Administration User Guide (1)

Optional Accessories

- Ingest terminal
- Additional External Storage
- Additional browsing Clients
- Non-Linear Editing Solutions
- DVStation Archive
- Backup Solutions
- Playout Solutions

PDW-510	154
PDW-510P	156
PDW-530	158
PDW-530P	160
PDW-1500	162
PDW-D1	164
PDW-V1	165
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CBK-NC01	167
CBK-SC01	167
CBK-SD01	168
CBK-PC01	168
PDJ-C1080	169
PDJ-A640	170
Media Preparation System ..	171
PDJ-CS10	172

PDW-510 XDCAM Camcorder (DVCAM Recording)

Features

- DVCAM recording •Superb picture and sound quality
- 12-bit A/D conversion •High-performance digital signal processing •2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD •Long recording time of 85 min.
- Shock- and dust-resistant disc drive •2.5-inch^{*1} type colour LCD screen •Thumbnail Search operation •Scene Selection operation •Proxy AV (low-resolution audio and video) Data recording •Metadata recording including Essence Mark, UMID, Extended UMID •Picture cache recording function (up to ten seconds retroactively)
- Progressive mode; NTSC: 29.97P or optional 23.976P^{*2}
- Slow shutter function •Turbo gain function (max. 48 dB)
- Auto Tracing White Balance (ATW) capability
- Multi-matrix function •Interval recording function
- Analogue composite output as standard •SDI output and analogue composite input as option •Four assignable buttons •Slot to accommodate a Sony WRR-855 Series wireless microphone receiver •Optional Ethernet adaptor
- "Memory Stick" stores camera setup parameters
- Intelligent light system powered from the camcorder's battery •Built-in optical filter wheels •Camera control from RM-B150/B750 •Compact and lightweight (approx. 5.8 kg including VF, BP-IL75 battery, disc and mic) •Low power consumption of 36 W



*1 Measured diagonally *2 Recording to disc is in 59.94i via 2-3 pull-down

Supplied Accessories

Operation manual (1)
Viewfinder (1)
Lens cap (1)
Shoulder belt (1)
Monaural microphone (1)

Optional Accessories

CBK-FC01 Pull-down (24P shooting) Board
CBK-SC01 Analogue Composite Input Board
CBK-SD01 SDI Output Board
CBK-NC01 Ethernet (100Base-TX) Adaptor
CA-701 Camcorder Adaptor
CA-702 Camcorder Adaptor
WLL-CA50 Wireless Camera Transmitter (UC)
WLL-RX55 Wireless Camera Receiver
RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BP-IL75 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
AC-550 AC Adaptor
AC-DN2B AC Adaptor
AC-DN10 AC Adaptor/Charger
VCT-14 Tripod Adaptor
BVF-V10 1.5-inch Type B/W Viewfinder (EIA)
BKW-401 Viewfinder Rotation Bracket
PFD23 Disc Professional Disc
MSA-A "Memory Stick" IC Memory Media
CCXA Cable Audio Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable

VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
DMX-P01 Portable digital mixer
WRR-855A UHF Synthesised Diversity Tuner (64U)
WRR-855A UHF Synthesised Diversity Tuner (AU)
WRR-855A UHF Synthesised Diversity Tuner (68U)
WRR-855A UHF Synthesised Diversity Tuner (KR)
WRR-855B UHF Synthesised Diversity Tuner (1416U)
WRR-855B UHF Synthesised Diversity Tuner (3032U)
WRR-855B UHF Synthesised Diversity Tuner (6264U)
WRR-855B UHF Synthesised Diversity Tuner (6668U)
WRR-861B UHF Synthesised Diversity Tuner (U6264)
WRR-861B UHF Synthesised Diversity Tuner (U6668)
WRR-862B UHF Synthesised Dual Diversity Tuner (1416U)
WRR-862B UHF Synthesised Dual Diversity Tuner (3032U)
WRR-862B UHF Synthesised Dual Diversity Tuner (6264U)
WRR-862B UHF Synthesised Dual Diversity Tuner (6668U)

Specifications

General

Mass:

- Approx. 4.1 kg (9 lb)
- 5.8 kg (12 lb 12 oz, with VF, Mic, Disc, BP-IL75 battery)

Power requirements:

- DC 12 V +5.0 V/-1.0 V

Power consumption:

- Approx. 36 W (while recording, with viewfinder, colour LCD off)

Operating temperature:

- 5 to 40 °C (+23 °F to +104 °F)

Storage temperature:

- 20 to +60 °C (-4 °F to +140 °F)

Humidity:

- 10 to 90% (relative humidity)

Continuous operating time:

- Approx. 120 min. w/BP-GL95 battery, approx. 90 min. w/BP-IL75 battery

Recording format

Video:

- DVCAM (25 Mb/s)

Proxy Video:

- MPEG-4

Audio:

- 4 ch/16 bits/48 kHz

Proxy Audio:

- A-law (4ch, 8 bits, 8 kHz)

Recording/playback time

- 85 min.

Signal inputs

Genlock video:

- BNC x1, 1.0 Vp-p, 75 Ω

Time code input:

- BNC x1, 0.5 to 18 Vp-p, 10 kΩ

Audio input:

- XLR-3-31 x2, line / mic / mic+48V / AES/EBU selectable

Mic input:

- XLR-3-31 x1

Signal outputs

Video output:

- BNC x1, 1.0 Vp-p, 75 Ω

Video test output:

- BNC x1, 1.0 Vp-p, 75 Ω

Time code output:

- BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

- Mini-jack x2 (front: monaural, rear: stereo/monaural)

Audio output (CH-1/CH-2):

- XLR 5-pin male (stereo)

Other inputs/outputs

Lens:

- 12-pin

Remote:

- 8-pin

Light:

- 2-pin, DC 12 V, max. 50 W

DC input:

- XLR 4-pin (for the optional AC-550)

DC output:

- 4-pin (for wireless microphone receiver), DC 12 V (MAX 0.2A)

Camcorder adapter:

- 40-pin

i.LINK:

- IEEE1394, DV IN/OUT or file access mode, 6-pin x1

Audio performance

Frequency response:

- 20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

- More than 85 dB

Distortion:

- Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

- Less than -70 dB (at 1 kHz, reference level)

Wow & flutter:

- Below measurable limit

Head room:

- 20 dB (ex-factory setting)

Camera section

Pickup device:

- 3-chip 2/3-inch type 16:9 widescreen

- Power HAD EX CCD

Total picture elements:

- 1038(H) x 1008(V)

Effective picture elements:

- 980 (H) x 494 (V)

Optical system:

- F1.4 prism

Built-in optical filters:

- 1 : 3200K, 2: 5600K+1/8ND, 3: 5600K,

- 4: 5600K+1/64ND

Shutter speed:

- 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)

Slow shutter:

- 1/2 to 1/30 (s) (1 to 8 and 16 frame accumulation)

Lens mount:

- 2/3" 48 bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

- F11 (typical)

Minimum illumination:

- Approx. 0.13 lx (F1.4 lens, +48 dB turbo gain, shutter off)

Gain selection:

- 3 dB, -0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB

Smear level:

- 140 dB (typical)

S/N ratio:

- 65 dB (typical)

Vertical resolution

- 400 TV Lines/450 TV Lines(EVS)

Registration:

- 0.05% (all zones, w/o lens)

Geometric distortion:

- Below measurable level (w/o lens)

Modulation depth at 5 MHz:

- 70% (16:9, typical)/55% (4:3, typical)

Viewfinder

CRT:

- 2.0-inch type monochrome

Controls:

- BRIGHT, CONTRAST, PEAKING controls, TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

- 450 TV lines (16:9)

Microphone:

- Ultra-directional (detachable)

Built-in LCD monitor

LCD:

- 2.5-inch type colour LCD monitor

"Eco Info"

- Halogenated flame retardants are not used in printed wiring boards.

PDW-510P XDCAM Camcorder (DVCAM Recording)

Features

- DVCAM recording •Superb picture and sound quality
- 12-bit A/D conversion •High-performance digital signal processing
- 2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD •Long recording time of 85 min. •Shock- and dust-resistant disc drive
- 2.5-inch^(*) type colour LCD screen •Thumbnail Search operation •Scene Selection operation
- Proxy AV (low-resolution audio and video) Data recording •Metadata recording including Essence Mark, UMID, Extended UMID •Picture cache recording function (up to ten seconds retroactively)
- Progressive mode: 25P •Slow shutter function •Turbo gain function (max. 48 dB)
- Auto Tracing White Balance (ATW) capability •Multi-matrix function •Interval recording function
- Analogue composite output as standard •SDI output and analogue composite input as option
- Four assignable buttons •Slot to accommodate a Sony WRR-855 Series wireless microphone receiver
- Optional Ethernet adaptor •"Memory Stick" stores camera setup parameters •Intelligent light system powered from the camcorder's battery
- Built-in optical filter wheels •Camera control from RM-B150/B750 •Compact and lightweight (approx. 5.8 kg including VF, battery, disc and mic)
- Low power consumption of 36 W

(*) Measured diagonally

(*) Recording to disc is in 59.94i via 2-3 pull-down



Supplied Accessories

Operation manual (1)
Viewfinder (1)
Lens cap (1)
Shoulder belt (1)
Monaural microphone (1)

Optional Accessories

CBK-SC01 Analogue Composite Input Board
CBK-SD01 SDI Output Board
CBK-NC01 Ethernet (100Base-TX) Adaptor
CA-701 Camcorder Adaptor
CA-702P Camcorder Adaptor
WLL-CA50 Wireless Camera Transmitter (CER)
WLL-RX55 Wireless Camera Receiver
RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BP-IL75 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
AC-550CE AC Adaptor
AC-DN2B AC Adaptor
AC-DN10 AC Adaptor/Charger
BVF-V10CE 1.5-inch Type B/W Viewfinder (CCIR)
BKW-401 Viewfinder Rotation Bracket
VCT-14 Tripod Adaptor
PFD23 Disc Professional Disc

MSA-A "Memory Stick" IC Memory Media
CCXA Cable Audio Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
DMX-P01 Portable digital mixer
WRR-855A UHF Synthesised Diversity Tuner (AU)
WRR-855B UHF Synthesised Diversity Tuner (21CE7)
WRR-855B UHF Synthesised Diversity Tuner (33CE7)
WRR-855B UHF Synthesised Diversity Tuner (62CE7)
WRR-855B UHF Synthesised Diversity Tuner (67CE7)
WRR-862A UHF Synthesised Dual Diversity Tuner (AU)
WRR-862B UHF Synthesised Dual Diversity Tuner (21CE7)
WRR-862B UHF Synthesised Dual Diversity Tuner (33CE7)
WRR-862B UHF Synthesised Dual Diversity Tuner (62CE7)
WRR-862B UHF Synthesised Dual Diversity Tuner (67CE7)
PDW-RMT500 Camera Control Software

Specifications

General

Mass:

Approx. 4.1 kg (9 lb)
5.8 kg (12 lb 12 oz, with VF, Mic, Disc,
BP-IL75 battery)

Power requirements:

DC 12 V +5.0 V/-1.0 V

Power consumption:

Approx. 36 W (while recording, with
viewfinder, colour LCD off)

Operating temperature:

-5 to 40 °C (+23 °F to +104 °F)

Storage temperature:

-20 to +60 °C (-4 °F to +140 °F)

Humidity:

10 to 90% (relative humidity)

Continuous operating time:

Approx. 120 min. w/BP-GL95 battery,
approx. 90 min. w/BP-IL75 battery

Recording format

Video:

DVCAM (25 Mb/s)

Proxy Video:

MPEG-4

Audio:

4 ch/16 bits/48 kHz

Proxy Audio:

A-law (4ch, 8 bits, 8 kHz)

Recording/playback time

85 min.

Signal inputs

Genlock video:

BNC x1, 1.0 Vp-p, 75 Ω

Time code input:

BNC x1, 0.5 to 18 Vp-p, 10 kΩ

Audio input:

XLR-3-31 x2, line / mic / mic+48V /
AES/EBU selectable

Mic input:

XLR-3-31 x1

Signal outputs

Video output:

BNC x1, 1.0 Vp-p, 75 Ω

Video test output:

BNC x1, 1.0 Vp-p, 75 Ω

Time code output:

BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

Mini-jack x2 (front: monaural, rear:
stereo/monaural)

Audio output (CH-1/CH-2):

XLR 5-pin male (stereo)

Other inputs/outputs

Lens:

12-pin

Remote:

8-pin

Light:

2-pin, DC 12 V, max. 50 W

DC input:

XLR 4-pin (for the optional AC-550CE)

DC output:

4-pin (for wireless microphone receiver),
DC 12 V (MAX 0.2A)

Camcorder adapter:

40-pin

i.LINK:

IEEE1394, DV IN/OUT or file access mode,
6-pin x1

Audio performance

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB

Distortion:

Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

Less than -70 dB (at 1 kHz, reference
level)

Wow & flutter:

Below measurable limit

Head room:

20 dB (ex-factory setting)

Camera section

Pickup device:

3-chip 2/3-inch type 16:9 widescreen

Power HAD EX CCD

Total picture elements:

1038(H) x 1188(V)

Effective picture elements:

980(H) x 582(V)

Optical system:

F1.4 prism

Built-in optical filters:

1 : 3200K, 2: 5600K+1/8ND, 3: 5600K,

4: 5600K+1/64ND

Shutter speed:

1/60, 1/125, 1/250, 1/500, 1/1000,

1/2000 (s)

Slow shutter:

1/2 to 1/25 (s) (1 to 8 and 16 frame
accumulation)

Lens mount:

2/3" 48 bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

F11 (typical)

Minimum illumination:

Approx. 0.13 lx (F1.4 lens, +48 dB turbo
gain, shutter off)

Gain selection:

-3 dB, -0 dB, 3 dB, 6 dB, 9 dB, 12 dB,

18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB

Smear level:

-140 dB (typical)

S/N ratio:

63 dB (typical)

Vertical resolution

480 TV Lines/530 TV Lines(EVS)

Registration:

0.05% (all zones, w/o lens)

Geometric distortion:

Below measurable level (w/o lens)

Modulation depth at 5 MHz:

70% (16:9, typical)/55% (4:3, typical)

Viewfinder

CRT:

2.0-inch type monochrome

Controls:

BRIGHT, CONTRAST, PEAKING controls,
TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

450 TV lines (16:9)

Microphone:

Ultra-directional (detachable)

Built-in LCD monitor

LCD:

2.5-inch type colour LCD monitor

"Eco Info"

Halogenated flame retardants are not used
in printed wiring boards.

PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Features

- MPEG IMX (50/40/30 Mb/s) and DVCAM switchable recording
- Superb picture and sound quality
- 12-bit A/D conversion
- High-performance digital signal processing
- 2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD
- Long recording time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min.
- Shock- and dust-resistant disc drive
- 2.5-inch^(*) type colour LCD screen
- Thumbnail Search operation
- Scene Selection operation
- Proxy AV (low-resolution audio and video) Data recording
- Metadata recording including essence mark, UMID, Extended UMID
- Picture cache recording function (up to ten seconds retroactively)
- Progressive mode; NTSC: 29.97P or optional 23.976P^(*)
- Slow shutter function
- Turbo gain function (max. 48 dB)
- Auto Tracing White Balance (ATW) capability
- Multi-matrix function
- Interval recording function
- Analogue composite output as standard
- SDI output and analogue composite input as option
- Four assignable buttons
- Slot to accommodate a Sony WRR-855 Series wireless microphone receiver
- Optional Ethernet adaptor
- "Memory Stick" stores camera setup parameters
- Intelligent light system powered from the camcorder's battery
- Dual optical filter wheels for ND and CC
- i.LINK (DV stream) output from MPEG IMX playback
- Camera control from RM-B150/B750
- Compact and lightweight (approx. 5.8 kg including VF, BP-IL75 battery, disc and mic)
- Low power consumption of 36 W

(*)1) Measured diagonally (*)2) Recording to disc is in 59.94i via 2:3 pull-down



Supplied Accessories

Operation manual (1)
Viewfinder (1)
Lens cap (1)
Shoulder belt (1)
Monaural microphone (1)

Optional Accessories

CBK-FC01 Pull-down (24P shooting) Board
CBK-SC01 Analogue Composite Input Board
CBK-SD01 SDI Output Board
CBK-NC01 Ethernet (100Base-TX) Adaptor
CA-701 Camcorder Adaptor
CA-702 Camcorder Adaptor
WLL-RX55 Wireless Camera Receiver
WLL-CA50 Wireless Camera Transmitter (UC)
RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BP-IL75 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
AC-550 AC Adaptor
AC-DN2B AC Adaptor
AC-DN10 AC Adaptor/Charger
BVF-VC10W 1.35-inch Type Colour Viewfinder
BKW-401 Viewfinder Rotation Bracket
VCT-14 Tripod Adaptor
PFD23 Disc Professional Disc
MSA-A "Memory Stick" IC Memory Media
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable

VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
CCXA Cable Audio Cable
DMX-P01 Portable digital mixer
WRR-855A UHF Synthesised Diversity Tuner (64U)
WRR-855A UHF Synthesised Diversity Tuner (AU)
WRR-855A UHF Synthesised Diversity Tuner (68U)
WRR-855A UHF Synthesised Diversity Tuner (KR)
WRR-855B UHF Synthesised Diversity Tuner (1416U)
WRR-855B UHF Synthesised Diversity Tuner (3032U)
WRR-855B UHF Synthesised Diversity Tuner (6264U)
WRR-855B UHF Synthesised Diversity Tuner (6668U)
WRR-861B UHF Synthesised Diversity Tuner (U6264)
WRR-861B UHF Synthesised Diversity Tuner (U6668)
WRR-862B UHF Synthesised Dual Diversity Tuner (1416U)
WRR-862B UHF Synthesised Dual Diversity Tuner (3032U)
WRR-862B UHF Synthesised Dual Diversity Tuner (6264U)
WRR-862B UHF Synthesised Dual Diversity Tuner (6668U)

Specifications

General

Mass:

- Approx. 4.1 kg (9 lb)
- 5.8 kg (12 lb 12 oz, with VF, Mic, Disc, BP-IL75 battery)

Power requirements:

- DC 12 V +5.0 V/-1.0 V

Power consumption:

- Approx. 36 W (while recording, with viewfinder, colour LCD off)

Operating temperature:

- 5 to 40 °C (+23 °F to +104 °F)

Storage temperature:

- 20 to +60 °C (-4 °F to +140 °F)

Humidity:

- 10 to 90% (relative humidity)

Continuous operating time:

- Approx. 90 min. w/BP-IL75 battery, approx. 120 min. w/BP-GL95 battery

Recording format

Video:

- MPEG IMX (50/40/30 Mb/s), DVCAM (25 Mb/s)

Proxy Video:

- MPEG-4

Audio:

- MPEG IMX: 4 ch/16 bits/48 kHz or 4 ch/24 bits/48 kHz
- DVCAM: 4 ch/16 bits/48 kHz

Proxy Audio:

- A-law (4ch, 8 bits, 8 kHz)

Recording/playback time

MPEG IMX:

- 50 Mb/s: 45 min., 40 Mb/s: 55 min., 30 Mb/s: 68 min.

DVCAM:

- 85 min.

Signal inputs

Genlock video:

- BNC x1, 1.0 Vp-p, 75 Ω

Time code input:

- BNC x1, 0.5 to 18 Vp-p, 10 kΩ

Audio input:

- XLR-3-31 x2, line / mic / mic+48V / AES/EBU selectable

Mic input:

- XLR-3-31 x1

Signal outputs

Video output:

- BNC x1, 1.0 Vp-p, 75 Ω

Video test output:

- BNC x1, 1.0 Vp-p, 75 Ω

Time code output:

- BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

- Mini-jack x2 (front: monaural, rear: stereo/monaural)

Audio output (CH-1/CH-2):

- XLR 5-pin male (stereo)

Other inputs/outputs

Lens:

- 12-pin

Remote:

- 8-pin

Light:

- 2-pin, DC 12 V, max. 50 W

DC input:

- XLR 4-pin (for the optional AC-550)

DC output:

- 4-pin (for wireless microphone receiver), DC 12 V (MAX 0.2A)

Camcorder adapter:

- 40-pin

i.LINK:

- IEEE1394, DV IN/OUT or file access mode, 6-pin x1

Audio performance

Frequency response:

- 20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

- More than 85 dB

Distortion:

- Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

- Less than -70 dB (at 1 kHz, reference level)

Wow & flutter:

- Below measurable limit

Head room:

- 20 dB (ex-factory setting)

Camera section

Pickup device:

- 3-chip 2/3-inch type 16:9 widescreen
- Power HAD EX CCD

Total picture elements:

- 1038(H) x 1008(V)

Effective picture elements:

- 980(H) x 494(V)

Optical system:

- F1.4 prism

Built-in optical filters:

- 1 : Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
- A: CROSS, B: 3200K, C: 4300K, D: 6300K

Shutter speed:

- 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)

Slow shutter:

- 1/2 to 1/30 (s) (1 to 8 and 16 frame accumulation)

Lens mount:

- 2/3" 48 bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

- F11 (typical)

Minimum illumination:

- Approx. 0.13 lx (F1.4 lens, +48 dB turbo gain, shutter off)

Gain selection:

- 3 dB, -0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB

Smear level:

- 140 dB (typical)

S/N ratio:

- 65 dB (typical)

Vertical resolution

- 400 TV Lines/450 TV Lines(EVS)

Registration:

- 0.05% (all zones, w/o lens)

Geometric distortion:

- Below measurable level (w/o lens)

Modulation depth at 5 MHz:

- 70% (16:9, typical)/55% (4:3, typical)

Viewfinder

CRT:

- 2.0-inch type monochrome

Controls:

- BRIGHT, CONTRAST, PEAKING controls, TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

- 450 TV lines (16:9)

Microphone:

- Ultra-directional (detachable)

Built-in LCD monitor

LCD:

- 2.5-inch type colour LCD monitor

"Eco Info"

- Halogenated flame retardants are not used in printed wiring boards.

PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Features

- MPEG IMX (50/40/30 Mb/s) and DVCAM switchable recording
- Superb picture and sound quality
- 12-bit A/D conversion
- High-performance digital signal processing
- 2/3-inch type 16:9/4:3 widescreen Power HAD EX CCD
- Long recording time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min.
- Shock- and dust-resistant disc drive
- 2.5-inch^(*) type colour LCD screen
- Thumbnail Search operation
- Scene Selection operation
- Proxy AV (low-resolution audio and video) Data recording
- Metadata recording including Essence Mark, UMID, Extended UMID
- Picture cache recording function (up to ten seconds retroactively)
- Progressive mode: 25P
- Slow shutter function
- Turbo gain function (max. 48 dB)
- Auto Tracing White Balance (ATW) capability
- Multi-matrix function
- Interval recording function
- Analogue composite output as standard
- SDI output and analogue composite input as option
- Four assignable buttons
- Slot to accommodate a Sony WRR-855 Series wireless microphone receiver
- Optional Ethernet adaptor
- "Memory Stick" stores camera setup parameters
- Intelligent light system powered from the camcorder's battery
- Dual optical filter wheels for ND and CC
- i.LINK (DV stream) output from MPEG IMX playback
- Camera control from RM-B150/B750
- Compact and lightweight (approx. 5.8 kg including VF, BP-IL75 battery, disc and mic)
- Low power consumption of 36 W

(*1) Measured diagonally (*2) Recording to disc is in 59.94i via 2:3 pull-down



Supplied Accessories

Operation manual (1)
Viewfinder (1)
Lens cap (1)
Shoulder belt (1)
Monaural microphone (1)

Optional Accessories

CBK-SC01 Analogue Composite Input Board
CBK-SD01 SDI Output Board
CBK-NC01 Ethernet (100Base-TX) Adaptor
CA-701 Camcorder Adaptor
CA-702P Camcorder Adaptor
WLL-CA50 Wireless Camera Transmitter (CER)
WLL-RX55 Wireless Camera Receiver
RM-B150 Remote Control Unit
RM-B750 Remote Control Unit
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BP-IL75 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
AC-550CE AC Adaptor
AC-DN2B AC Adaptor
AC-DN10 AC Adaptor/Charger
BVF-V10CE 1.5-inch Type B/W Viewfinder (CCIR)
VCT-14 Tripod Adaptor
BKW-401 Viewfinder Rotation Bracket
PFD23 Disc Professional Disc
MSA-A "Memory Stick" IC Memory Media

CCXA Cable Audio Cable
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable
DSR-DU1 Video Disc Unit
CA-DU1 Camera Adaptor
DMX-P01 Portable digital mixer
WRR-855A UHF Synthesised Diversity Tuner (AU)
WRR-855B UHF Synthesised Diversity Tuner (21CE7)
WRR-855B UHF Synthesised Diversity Tuner (33CE7)
WRR-855B UHF Synthesised Diversity Tuner (62CE7)
WRR-855B UHF Synthesised Diversity Tuner (67CE7)
WRR-862A UHF Synthesised Dual Diversity Tuner (AU)
WRR-862B UHF Synthesised Dual Diversity Tuner (21CE7)
WRR-862B UHF Synthesised Dual Diversity Tuner (33CE7)
WRR-862B UHF Synthesised Dual Diversity Tuner (62CE7)
WRR-862B UHF Synthesised Dual Diversity Tuner (67CE7)
PDW-RMT500 Camera Control Software

Specifications

General

Mass:

- Approx. 4.1 kg (9 lb)
- 5.8 kg (12 lb 12 oz, with VF, Mic, Disc, BP-IL75 battery)

Power requirements:

- DC 12 V +5.0 V/-1.0 V

Power consumption:

- Approx. 36 W (while recording, with viewfinder, colour LCD off)

Operating temperature:

- 5 to 40 °C (+23 °F to +104 °F)

Storage temperature:

- 20 to +60 °C (-4 °F to +140 °F)

Humidity:

- 10 to 90% (relative humidity)

Continuous operating time:

- Approx. 120 min. w/BP-GL95 battery, approx. 90 min. w/BP-IL75 battery

Recording format

Video:

- MPEG IMX (50/40/30 Mb/s), DVCAM (25 Mb/s)

Proxy Video:

- MPEG-4

Audio:

- MPEG IMX: 4 ch/16 bits/48 kHz or 4 ch/24 bits/48 kHz
- DVCAM: 4 ch/16 bits/48 kHz

Proxy Audio:

- A-law (4ch, 8 bits, 8 kHz)

Recording/playback time

MPEG IMX:

- 50 Mb/s: 45 min., 40 Mb/s: 55 min., 30 Mb/s: 68 min.

DVCAM:

- 85 min.

Signal inputs

Genlock video:

- BNC x1, 1.0 Vp-p, 75 Ω

Time code input:

- BNC x1, 0.5 to 18 Vp-p, 10 kΩ

Audio input:

- XLR-3-31 x2, line / mic / mic+48V / AES/EBU selectable

Mic input:

- XLR-3-31 x1

Signal outputs

Video output:

- BNC x1, 1.0 Vp-p, 75 Ω

Video test output:

- BNC x1, 1.0 Vp-p, 75 Ω

Time code output:

- BNC x1, 1.0 Vp-p, 75 Ω

Earphone:

- Mini-jack x2 (front: monaural, rear: stereo/monaural)

Audio output (CH-1/CH-2):

- XLR 5-pin male (stereo)

Other inputs/outputs

Lens:

- 12-pin

Remote:

- 8-pin

Light:

- 2-pin, DC 12 V, max. 50 W

DC input:

- XLR 4-pin (for the optional AC-550CE)

DC output:

- 4-pin (for wireless microphone receiver), DC 12 V (MAX 0.2A)

Camcorder adapter:

- 40-pin

i.LINK:

- IEEE1394, DV IN/OUT or file access mode, 6-pin x1

Audio performance

Frequency response:

- 20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

- More than 85 dB

Distortion:

- Less than 0.08% (at 1 kHz, reference level)

Crosstalk:

- Less than -70 dB (at 1 kHz, reference level)

Wow & flutter:

- Below measurable limit

Head room:

- 20 dB (ex-factory setting)

Camera section

Pickup device:

- 3-chip 2/3-inch type 16:9 widescreen Power HAD EX CCD

Total picture elements:

- 1038(H) x 1188(V)

Effective picture elements:

- 980(H) x 582(V)

Optical system:

- F1.4 prism

Built-in optical filters:

- 1 : Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND
- A: CROSS, B: 3200K, C: 4300K, D: 6300K

Shutter speed:

- 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 (s)

Slow shutter:

- 1/2 to 1/25 (s) (1 to 8 and 16 frame accumulation)

Lens mount:

- 2/3" 48 bayonet mount

Sensitivity (2000 lx, 89.9% reflectance):

- F11 (typical)

Minimum illumination:

- Approx. 0.13 lx (F1.4 lens, +48 dB turbo gain, shutter off)

Gain selection:

- 3 dB, -0 dB, 3 dB, 6 dB, 9 dB, 12 dB, 18 dB, 24 dB, 30 dB, 36 dB, 42 dB, 48 dB

Smear level:

- 140 dB (typical)

S/N ratio:

- 63 dB (typical)

Vertical resolution

- 480 TV Lines/530 TV Lines(EVS)

Registration:

- 0.05% (all zones, w/o lens)

Geometric distortion:

- Below measurable level (w/o lens)

Modulation depth at 5 MHz:

- 70% (16:9, typical)/55% (4:3, typical)

Viewfinder

CRT:

- 2.0-inch type monochrome

Controls:

- BRIGHT, CONTRAST, PEAKING controls, TALLY, ZEBRA, DISPLAY switches

Horizontal resolution:

- 450 TV lines (16:9)

Microphone:

- Ultra-directional (detachable)

Built-in LCD monitor

LCD:

- 2.5-inch type colour LCD monitor

"Eco Info"

- Halogenated flame retardants are not used in printed wiring boards.

PDW-1500 XDCAM Compact Deck (Recording and Playback)

Features

- MPEG IMX/DVCAM recording and playback •Two optical heads allows transfer speeds of 2.5x for MPEG IMX (at 50 Mb/s) and 5x for DVCAM streams •Proxy AV (low-resolution audio and video) Data recording
- High-speed transfer of Proxy AV Data at 50-times speed
- Ability to write EDL data (Clip List) back onto disc
- Metadata recording •Long recording/playback time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min. •A variety of interfaces including SDI I/O, analogue composite I/O, digital audio I/O, analogue audio I/O, time code I/O, headphone output, audio monitor output, Gigabit Ethernet, i.LINK (DV IN/OUT or file access mode^(*)) •Thumbnail Search operation •Scene Selection operation •Search speed (in colour) - JOG: -1 to +2 times normal speed, Shuttle: ± 50 times normal speed •Audio clip insertion
- i.LINK (DV stream) output from MPEG IMX playback

(*) For connection with third party products using this mode, please contact your nearest Sony office.

Supplied Accessories

- Operation manual (1)
- Quick manual (1)
- PDZ-1 proxy browsing software (1)
- Proxy viewer

Optional Accessories

- PFD23 Disc Professional Disc
- RCC-G Cables 9-pin/9-pin Cable
- VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
- VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable



Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

75 W

Operating temperature:

+5 to +40°C (+41 to +104°F)

Storage temperature:

-20 to +60°C (-4 to +140°F)

Operating humidity:

10 to 90% (relative humidity)

Mass:

7.4 kg (16 lb 5 oz)

Dimensions (W x H x D):

210 x 130 x 415 mm

(8 3/8 x 5 1/8 x 16 3/8 inches)

Recording format

Video:

MPEG IMX (50/40/30 Mb/s), DVCAM
(25 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG IMX: 8 ch/16 bit/48 kHz or
4 ch/24 bit/48 kHz
DVCAM: 4 ch/16 bit/48 kHz

Proxy Audio:

A-law (8/4 ch, 8 bit, 8 kHz)

Playback format

Video:

MPEG IMX (50/40/30 Mb/s), DVCAM
(25 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG IMX: 8 ch/16 bit/48 kHz or
4 ch/24 bit/48 kHz
DVCAM: 4 ch/16 bit/48 kHz

Proxy Audio

A-law (8/4 ch, 8 bit, 8 kHz)

Recording/playback time

MPEG IMX:

50 Mb/s: 45 min., 40 Mb/s: 55 min.,
30 Mb/s: 68 min.

DVCAM:

85 min.

Search speed (in colour)

Jog mode:

-1 time to 2 times normal playback
speed

Shuttle mode:

±50 times normal playback speed

Signal inputs

Analogue reference input:

BNC x2 (including loop through), 1.0 Vp-p,
75 Ω, sync negative

Analogue composite input:

BNC x2 (including loop through), 1.0 Vp-p,
75 Ω, sync negative

SDI input:

BNC x1, SMPTE 259M, (ITU-R BT656-3),
270 Mb/s

Analogue audio input:

XLR x2 (channel selectable), -9 dBu to
28 dBu, 10 kΩ, balanced

Digital audio input:

AES/EBU, BNC x2, 4 channels

Time code input:

BNC x1

Signal outputs

Analogue composite video output:

BNC x2 (including one character out),
1.0 Vp-p, 75 Ω, sync negative

SDI output:

BNC x2 (including one character out),
SMPTE 259M (ITU-R BT656-3), 270 Mb/s

Analogue audio output:

XLR x2 (ch. selectable), +4 dBu, 600 Ω
load, low impedance, balanced

Audio monitor output:

RCA x1 (L, R, Mix), -6 dBu, 47 kΩ,
unbalanced

Digital audio output:

BNC x2, 4 channels

Headphone output:

Jack x1, -16 dBu, 8 Ω, unbalanced

Time code output:

BNC x1

Other inputs and outputs

i.LINK:

IEEE 1394, DV IN/OUT or file access
mode, 6-pin x 1

Ethernet:

1000Base-T (RJ-45 x1)

RS-422A:

D-sub 9-pin x1 (VTR protocol)

Video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantisation:

10 bits/sample

Error correction:

Reed Solomon Code

Analogue composite input to analogue

composite output

Bandwidth:

30 Hz to 4.5 MHz +0.5/-1.5 dB (NTSC)

25 Hz to 5.5 MHz +0.5/-1.5 dB (PAL)

S/N ratio:

53 dB or more

Differential gain:

2% or less

Differential phase:

2° or less

Y/C delay:

20 ns or less

K-factor (2T pulse):

2% or less

Processor adjustment range

Video level:

±3 dB

Chroma

±3 dB

Set up/black level:

±15 IRE/±105 mV

Chroma phase/hue:

±30°

System sync phase:

±15 ms

System SC phase:

±200 ns

Audio performance

Frequency response:

20 Hz to 20 kHz +0.5/-1.0 dB (0 dB at 1 kHz)

Dynamic range:

More than 90 dB

Distortion:

Less than 0.05% (at 1 kHz)

Head room:

20 dB (18 dB selectable)

"Eco Info"

Halogenated flame retardants are not used
in cabinets and in printed wiring boards.

PDW-D1 XDCAM Drive

Features

•Low-cost, lightweight XDCAM drive •Interfaces are i.LINK (File Access Mode) and i.LINK AVC •DC 12V or AC

Supplied Accessories

Setup software for Windows PC
PDZ-1 Software
XDCAM Proxy Viewer
Manual

Optional Accessories

PFD23 Professional Disc
VMC-IL4615/4635 i.LINK Cable
(4-pin to 6-pin, 1.5m/3.5m)
VMC-IL6615/6635 i.LINK Cable
(6-pin to 6-pin, 1.5m/3.5m)
BKP-L551 Battery Adaptor
BP-GL65 Lithium-ion Battery Pack
BP-GL95 Lithium-ion Battery Pack
BP-L60S Lithium-ion Battery

Specifications

Power requirements

AC 100 to 240 V, 50/60Hz, DC (with battery)

Power consumption

25W

Operating temperature

0 to 40 °C

Storage temperature

-20 to +60 °C

Humidity

20 to 90 % (relative humidity)

Mass

3.0kg (6lb 9oz)

Dimensions (W x H x D)

78 x 182 x 257 mm
(3 1/8 x 7 1/4 x 10 1/8 inches)

AVC Recording format:

Video

DVCAM (25Mb/s)

Proxy Video

MPEG-4

Audio

4ch/16bit/48kHz

Proxy Audio

A-law (4ch, 8bit, 8kHz)

File Access Mode Recording format:

Video

MPEG IMX (50/40/30Mb/s),
DVCAM (25Mb/s)

Proxy Video

MPEG-4

Audio

MPEG IMX:
8ch/16bit/48kHz or 4ch/24bit/48kHz
DVCAM: 4ch/16bit/48kHz

Proxy Audio

A-law(4/8ch, 8bit, 8kHz)

Playback format

Video

MPEG IMX
(50/40/30Mb/s), DVCAM(25Mb/s)

Proxy Video

MPEG-4

Audio

MPEG IMX:
8ch/16bit/48kHz or 4ch/24bit/48kHz

DVCAM:

4ch/16bit/48kHz

Proxy Audio

A-law(4/8ch, 8bit, 8kHz)

Recording/playback time

MPEG IMX:

50Mb/s: 45 min

40Mb/s: 55 min

30Mb/s: 68 min

DVCAM:

85 min

Note: through i.LINK AVC, IMX format is down-converted to DV format.



PDW-V1 XDCAM Mobile Deck (Playback and File Recording)

Features

- Playback of MPEG IMX/DVCAM recordings
- High-resolution AV files (MPEG IMX/DVCAM) and Proxy AV (low-resolution audio and video) files can be recorded via its Ethernet interface or i.LINK (file access mode^(*)) interface^(**)
- High-speed transfer of proxy AV data at 30-times speed
- Long playback time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min.
- Metadata recording
- Ability to write EDL data (Clip List) back onto disc
- Compact, lightweight design
- Allows transfer speeds of 1.25x for MPEG IMX (at 50 Mb/s) and 2.5x for DVCAM streams (equipped with one optical head)
- 3.5 inch^(**) type colour LCD screen for monitoring pictures and black-and-white LCD screen for displaying information such as time codes, audio meters and disc capacity
- Thumbnail Search operation
- Scene Selection operation
- Analogue RGB output capability for direct connection to computer displays
- AC/battery-powered operation
- Built-in audio speaker
- Network connectivity (100Base-TX)
- Search speed (in colour) - JOG: -1 to 1 times normal speed, Shuttle: ± 20 times normal speed
- i.LINK (DV stream) output from MPEG IMX playback

(*1) For connection with third party products using this mode, please contact your nearest Sony office. (*2) The PDW-V1 does not support synchronous video/audio input. (*3) Viewable area measured diagonally



Supplied Accessories

Operation manual (1)
PDZ-1 proxy browsing software (1)
Shoulder belt (1)
Proxy viewer

Optional Accessories

PF23 Disc Professional Disc
BP-IL75 Rechargeable Lithium-ion Battery Pack
BP-M100 Rechargeable Nickel Metal Hydride Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BC-M50 Ni-MH & Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable

Specifications

General

Power requirements:
AC 100 to 240 V, 50/60 Hz, DC (with battery)

Power consumption:
43 W

Operating temperature:
+0 to +40°C (+32 to +104°F)

Storage temperature:
-20 to +60°C (-4 to +140°F)

Humidity:
10 to 90% (relative humidity)

Storage humidity:
Less than 90%

Mass:
3.5 kg (7.7 lb)

Dimensions (W x H x D):

210 x 90 x 320 mm
(8 3/8 x 3 5/8 x 12 5/8 inches)

Recording format

Proxy Video:
MPEG-4
Proxy Audio
A-law (8/4 ch, 8 bit, 8 kHz)

Playback format

Video:
MPEG IMX (50/40/30 Mb/s), DVCAM (25 Mb/s)
Proxy Video:
MPEG-4
Audio:
MPEG IMX: 8 ch/16 bit/48 kHz or 4 ch/24 bit/48 kHz
DVCAM: 4 ch/16 bit/48 kHz
Proxy Audio:
A-law (8/4ch, 8 bit, 8 kHz)

Playback time

MPEG IMX:
50 Mb/s: 45 min., 40 Mb/s: 55 min., 30 Mb/s: 68 min.
DVCAM:
85 min.

Search speed (in colour)

Jog mode:
 ± 1 times normal playback speed
Shuttle mode:
 ± 20 times normal playback speed

Signal outputs

Analogue composite video:
BNC x1 (character out), 1.0 Vp-p, 75 Ω , sync negative
SDI output:
BNC x1 (character out), SMPTE 259M (ITU-R BT656-3), 270 Mb/s

Analogue RGB output:

D-sub 15-pin x1

Audio monitor output:

RCA x2 (L/R), -6 dBu, 47 k Ω , unbalanced

Headphone output:

Jack x1, -16 dBu, 8 Ω , unbalanced

Other inputs/outputs

i.LINK:

IEEE 1394, DV IN/OUT or file access mode, 6-pin x 1

Ethernet:

100Base-TX (RJ-45 x1)

Video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantisation:

10 bits/sample

Error correction:

Reed Solomon Code

"Eco Info"

Halogenated flame retardants are not used in printed wiring boards.

PDW-R1 XDCAM Field Recorder (Playback and Recording)

Features

- Recording of MPEG IMX/DVCAM recordings •MPEG IMX/DVCAM recording and playback •High-resolution AV files (MPEG IMX/DVCAM) and Proxy AV (low-resolution audio and video) files can be transferred via its Ethernet interface or i.LINK (file access mode^(*)) interfaces
- High-speed transfer of proxy AV data at 30-times speed (via its i.LINK (file access mode) interface).
- Long recording time; MPEG IMX at 30 Mb/s: 68 min., 40 Mb/s: 55 min., 50 Mb/s: 45 min., DVCAM: 85 min.
- Metadata recording •Ability to write EDL data (Clip List) back onto disc •Compact, lightweight design •Allows transfer speeds of 1.25x for MPEG IMX (at 50 Mb/s) and 2.5x for DVCAM streams (equipped with one optical head via its i.LINK (file access mode) interface)
- 3.5 inch⁽²⁾ type colour LCD screen for monitoring pictures and black-and-white LCD screen for displaying information such as time codes, audio meters and disc capacity
- Thumbnail Search operation •Scene Selection operation
- AC/DC/battery-powered operation •Built-in audio speaker
- Network connectivity (100Base-TX) •Search speed (in colour) - JOG: -1 to 1 times normal speed, Shuttle: +20 times normal speed •i.LINK (DV stream) output from MPEG IMX playback

(*1) For connection with third party products using this mode, please contact your nearest Sony office. (*2) Viewable area measured diagonally



Supplied Accessories

- Operation manual (1)
- PDZ-1 proxy browsing software (1)
- Proxy viewer

Optional Accessories

- PFD23 Disc Professional Disc
- BP-L60S Rechargeable Lithium-ion Battery Pack
- BP-GL95 Rechargeable Lithium-ion Battery Pack
- BC-M150 Ni-MH & Li-ion Battery Charger
- VMC-IL46 cables 4-pin <-> 6-pin i.LINK Cable
- VMC-IL66 cables 6-pin <-> 6-pin i.LINK Cable

Specifications

General

- Power requirements:
 - AC 100 to 240 V, 50/60 Hz,
 - DC (with battery), EXT-DC
- Operating temperature:
 - +0 to +40°C (+32 to +104°F)
- Storage temperature:
 - 20 to +60°C (-4 to +140°F)
- Humidity:
 - 10 to 90% (relative humidity)
- Storage humidity:
 - Less than 90%

Mass:

4.0kg

Dimensions (W x H x D):

230 x 100 x 352 mm

Recording format

Proxy Video:

MPEG-4

Proxy Audio

A-law (8/4 ch, 8 bit, 8 kHz)

Recording and Playback format

Video:

MPEG IMX (50/40/30 Mb/s),
DVCAM (25 Mb/s)

Proxy Video:

MPEG-4

Audio:

MPEG IMX: 8 ch/16 bit/48 kHz or
4 ch/24 bit/48 kHz
DVCAM: 4 ch/16 bit/48 kHz

Proxy Audio:

A-law (8/4ch, 8 bit, 8 kHz)

Playback time

MPEG IMX:
50 Mb/s: 45 min., 40 Mb/s: 55 min.,
30 Mb/s: 68 min.

DVCAM:

85 min.

Search speed (in colour)

Jog mode:
+1 times normal playback speed
Shuttle mode:
+20 times normal playback speed

Signal inputs

Ref. Video:
BNC x1 , 1.0 Vp-p, 75 Ω, sync negative

Analogue composite video:

BNC x1 , 1.0 Vp-p, 75 Ω, sync negative

SDI:

BNC 1 , SMPTE 259M (ITU-R BT656-3),
270 Mb/s

Analogue Audio:

XLR x 2(channel selectable),
+4/0/-3/-6dBu(selectable from menu)
10 kΩ, balanced

Digital Audio(AES/EBU):

BNC x2, 4 channels

Time code:

BNC x1

Signal outputs

Analogue composite video:
BNC x1 (character out),
1.0 Vp-p, 75 Ω, sync negative

SDI output:

BNC x1, SMPTE 259M (ITU-R BT656-3),
270 Mb/s
BNC x1 (character out), SMPTE 259M
(ITU-R BT656-3), 270 Mb/s

Audio output

XLR x 2 (channel selectable),
+4/0/-3/-6 dBu (selectable from menu)
600 Ω load, low impedance, balanced
Digital Audio(AES/EBU) output 1/2, 3/4
BNC x2, 4channels

Audio monitor output:

XLR output can be switched to monitor by
SetupMenu

Headphone output:

Jack x1, ∞ - -13 dBu, 8 Ω, unbalanced

Other inputs/outputs

i.LINK:

IEEE 1394, DV IN/OUT or file access mode,
6-pin x 1

Ethernet:

100Base-TX (RJ-45 x1)

RS-422A:

D-sub 9-pin x1(VTR protocol)

DC out

4-pin, Supplies power of 12V DC to the
BVR-3 or RM-280 Remote control unit.

Video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantisation:

10 bits/sample

Error correction:

Reed Solomon Code

"Eco Info"

Halogenated flame retardants are not used in
printed wiring boards.

CBK-FC01 Pull-down (24P shooting) Board

Features

- Provides progressive modes of 23.976P to offer a film-like effect

*Recording to disc is in 59.94i via 2-3 pull-down.

Note: Only applicable for NTSC versions, PDW-510P & PDW-530P containing 25P function as standard.

Applicable Models

PDW-510 NTSC version XDCAM Camcorder
(DVCAM Recording)

PDW-530 NTSC version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)



CBK-NC01 Ethernet (100Base-TX) Adaptor

Features

- Allows PDW-530/530P//510/510P camcorders to connect to an Ethernet network

Applicable Models

PDW-510 NTSC version XDCAM Camcorder
(DVCAM Recording)

PDW-510P PAL version XDCAM Camcorder
(DVCAM Recording)

PDW-530 NTSC version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)

PDW-530P PAL version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)



CBK-SC01 Analogue Composite Input Board

Analogue composite input board for
PDW-530/530P/510/510P camcorders

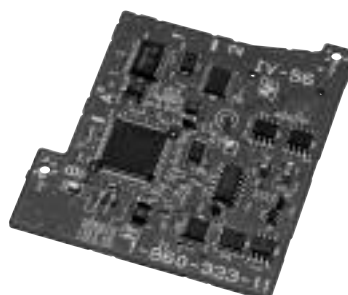
Applicable Models

PDW-510 NTSC version XDCAM Camcorder
(DVCAM Recording)

PDW-510P PAL version XDCAM Camcorder
(DVCAM Recording)

PDW-530 NTSC version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)

PDW-530P PAL version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)

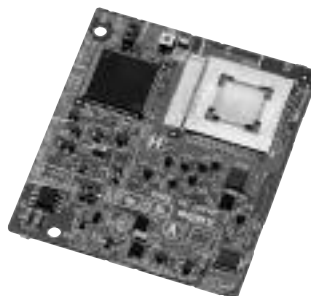


CBK-SD01 SDI Output Board

SDI output board for PDW-530/530P/510/510P,
DVW-970/970P, MSW-970/ 970P camcorders

Applicable Models

PDW-510 NTSC version XDCAM Camcorder
(DVCAM Recording)
PDW-510P PAL version XDCAM Camcorder
(DVCAM Recording)
PDW-530 NTSC version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)
PDW-530P PAL version XDCAM Camcorder
(MPEG IMX/DVCAM Recording)
DVW-970 Digital Betacam Camcorder
DVW-970P Digital Betacam Camcorder
MSW-970 MPEG IMX Camcorder
MSW-970P MPEG IMX Camcorder



CBK-PC01 XDCAM Memory Card Adaptor

Features

- The CBK-PC01 is a slot-in type PC card adaptor, so that it smartly connected to the PDW-510/530 series WRR slot-in holder
- By utilising the CBK-PC01 while shooting, proxy data file and metadata file can be stored in the memory card at the same time as in the disc

Applicable Models

PDW-510 & PDW-510P XDCAM Camcorder
(DVCAM recording)
PDW-530 & PDW-530P XDCAM Camcorder
(DVCAM / MPEG IMX recording)



PDJ-C1080 Professional Disc Cart Machine

Equally suitable for both transmission and storage applications. The PDJ-C1080 Professional Disc Cart Machine combines the robustness of cart based AV payout with the advantages of the networkable non-linear XDCAM optical disc-based storage media.

Features

The PDJ-C1080 Professional Disc Cart is an automatic changer system for optical disc cartridges that features multiple video decks (PDW-1500 Professional Disc Recorders) and disc cartridge shelves called "bin units". The PDJ-C1080 has the capacity for up to 4 PDW-1500 decks, with bins to hold up to 80 discs included in the standard product. In other words, capacity is provided to load up to 113 hours of program material making this an ideal solution for automated payout & recording applications.

By using standard VCC protocol for control, the PDJ-C1080 has been designed as a "drop-in" replacement for existing flexicart systems, requiring minimal re-programming to interface with popular automation systems and reducing disruption to existing workflows.



XDCAM

Supplied Accessories

- Operation Manual (1)
- Installation Manual (1)
- Anchor plate (1 set)
- Eye bolt (4)

Optional Accessories

- PDW-1500 Professional Disc Recorder
- PFD23 Optical Disc Cartridge
- RCC-5G Remote Cable (5 m)

Performance

- Number of storable optical disc cartridges:
up to 80
- Number of mountable video decks:
up to 4
- Remote control interface:
RS-232C, RS-422A (VCC cart control protocol)
- Parallel I/O interface:
D-sub 50-pin

Specifications

General

- Power requirements:
100 to 240 V AC, 50/60Hz
- Current drain
9 to 3.75 A (not including video decks)
- Peak inrush current
Power ON, current probe method:
60 A (100V), 95 A (240V)
Hot switching inrush current, measured
in accordance with European standard
EN55103-1: 45 A (230V)
- Dimensions:
450 x 1830 x 900 mm (w/h/d)
(17 3/4 x 72 3/4 x 35 1/2 inches)
(not including projecting parts)
- Mass:
approx. 170 kg (374 lb 1 oz)
(not including video decks and optional
disc cartridges)

Environmental conditions

- Operating temperature:
5°C to 35°C (41°F to 95°F)
- Storage temperature:
-20°C to +55°C (-4°F to +131°F)
- Operating humidity:
20% to 90% (at 25°C/77°F, no
condensation)
- Storage humidity:
less than 75% (at 55°C/131°F or less)

Barcodes

- Optical disc cartridges to be used
in this Disc Cart are controlled using
barcodes of the following specifications:
- Code
Code 39
- Print format
16 characters x 3 lines
Narrow bar width: 0.19 mm
- Character format
ASCII codes

PDJ-A640 Professional Disc Cart Machine

With increased storage capacity and the flexibility to operate in both SD and HD, the PDJ-A640 Professional Disc Cart Machine can be used for a variety of applications including near-line archive storage, automatic ingest to production systems, and disc distribution etc.

Features

The PDJ-A640 Professional Disc Cart is an automatic changer system for optical disc cartridges that features multiple XDCAM video decks and disc cartridge shelves called "bin units". The PDJ-A640 has the capacity for up to 4 XDCAM decks; models supported are PDW-1500 (SD) and PDW-F70 (HD). Up to 640 discs can be installed in the unit to provide a storage capacity of up to 1,300 hours of program material making this an ideal solution for near-line storage and archival.



Supplied Accessories

Operation Manual (1)
Installation Manual (1)
Eye bolt (4)

Optional Accessories

PDW-1500/PDW-F70 Professional
Disc Recorder
PDBK-A640 Professional Disc Cart Kit for
PDW-F70
PFD23 Optical Disc Cartridge
RCC-5G Remote Control Cable (5 m)
AC Power Cords
For Great Britain:
1-777-823-12 (250V/10A, approx. 2.0 m)
For European countries except Great Britain:
1-551-631-15 (250V/10A, approx. 2.0 m)

Specifications

General

Power requirements
100 to 240 V AC, 50/60 Hz
Current drain
4 to 1.7 A (not including video decks)
Peak inrush current
(1) Power ON, current probe method:
65 A (100 V), 95 A (240 V)
(2) Hot switching inrush current,
measured in accordance with
European standard EN55103-1:
50 A (230 V)
Dimensions:
680 x 1950 x 1000 mm (w/h/d)
(26 7/8 x 76 7/8 x 39 3/8 inches)
Mass
approx. 330 kg (727 lb 8 oz)
(not including video decks and
optical disc cartridges)

Performance/capacity

Number of storable optical disc cartridges
up to 640
Number of mountable video decks
up to 4

Input connectors

REF.VIDEO
BNC type 2, Black Burst or
Composite Video
(1.0 Vp-p/75 Ω / unbalanced)
LTC IN
BNC type 1
(0 to 8 dBs/3.3 k Ω / unbalanced)

Control connectors

RS-422A
D-sub 9-pin, female 1
RS-232C
D-sub 25-pin, female 1
DECK1 to 4
D-sub 9-pin, female 4
GPI
D-sub 50-pin, female 1 (network) RJ-45 1,
10BASE-T/100BASETX

Environmental conditions

Operating temperature
5 °C to 35 °C (41 °F to 95 °F)
Storage temperature
-20 °C to +55 °C (-4 °F to +131 °F)
Operating humidity
20% to 90% (at 25 °C/77 °F,
no condensation)
Storage humidity less than 75%
(at 55 °C/131 °F or less)

Barcodes

Optical disc cartridges to be used in this Disc
Cart are controlled using barcodes of the
following three-line type or single-line type:
Code
Code 39
Print format
16 characters 3 lines
Narrow bar width: 0.19 mm
Character format
ASCII codes

Media Preparation System Barcode Preparation Software

Media Preparation System (MPS) from Sony is user-friendly and feature-rich software that facilitates and enhances the storage of physical media (Video tapes, Professional Disc) as well as metadata about those files on a database.

Preparing and configuring such information can be consuming, both in terms of time and resources.

And this is where MPS from Sony truly adds value – in making it easier and quicker than ever before to prepare your media for transmission systems such as LMS and Flexicart. In addition, MPS has recently been enhanced to provide compatibility with Sony's XDCAM Professional Disc and XDCAM Cart, so you can file, archive, retrieve and exploit all of your media files quickly, easily and efficiently.

MPS allows valuable information such as ID data, Title, Time code (SOM and DUR) to be recorded and recognised by the transmission device. MPS prepares a barcode label containing the information and also codes the information on to the media itself.

Features

MPS has been further enhanced to support barcoding of Sony's XDCAM Professional Disc media.

Three lines of Code 39 barcode allows for entry of a total of 48 ASCII characters including ID, Title, SOM, Duration, etc. Further metadata can then be stored directly on the XDCAM disc itself. XDCAM barcode labels produced by MPS provide full compatibility with Sony's PDJ-C1080 Professional Disc Cart Machine.



Specifications

Hardware components:

- PC workstation with:
 - CPU Pentium 200 Mhz or over Ethernet network recommended 64Mb RAM or more
 - 1 or 2 available RS-232 COM ports
- Compatible with analogue VTRs (BVW series) or digital VTRs (DVW, DNW series). A player can be used with mono-segment tapes or to read UB. A recorder is required to write UB on a multi-segment tape.
- Compatible with XDCAM PDW-Series decks.
- Driver for Sony Barcode reader : BVBR-10
- Driver for Sony Barcode printer : BVBP-14
- Compatible with Avery AP Series
 - To print XDCAM compatible labels.
- Compatible with HP LaserJet 6 (or equivalent with 2 trays):
 - To print barcode label and jacket for small or large Betacam tapes
 - To print media technical report
 - To print database information

Software components :

- Windows 2000 or XP operating system
- Database SQL server (Borland Interbase 4.2)
 - Btrieve Database import (CPS software compatibility)
- Multi-user management (with password software access)
- Multi-media management (e.g. server, main tape, backup tape) which can manage the same ID on several media (multiple IDs can not be used for the same media).
- Remote VTR (Eject, Play, FFW, REW, JOG, Shuttle) with Time Code, VTR status (Rec. Inhibit, Tape out, Cue), VTR type provided in real time
- VTR Mark IN and Mark Out import
- User Bits Read, User Bits Write, User Bits Check
- 40 Comment records with Time Code are managed with fields such as Credits, Video Drops, Audio Click and Patterns.
- All combo box items can be customised (stored in a database)
- All new combo box choices can be customised (stored in INI file)
- 6 Custom Fields are available:
 - Date Field
 - Edit Field
 - 4 Combo boxes
- Copy function allows fields to be copied on each segment and the date to be customised in INI file
- Hardware configuration stored in INI file
- Warning information for invalid duration (customised in INI file)
- Security function prevents forbidden characters, such as é, è and à, from being entered
- MDI windows (several media records can be opened at the same time)
- All functions can also be performed using the keyboard (except JOG / Shuttle VTR operations)
- Compatible with the TMS protocol on BZA-800 Series and BZC-2100 software

PDJ-CS10 Cart Interface Software

Configured with PDJ-CS10 Cart Interface Software, the PDJ-C1080 and PDJ-A640 can interface with MXF-compliant editing and asset management systems from other leading vendors. Professional Discs resident in the PDJ-C1080 or PDJ-A640 appear to external systems via standard FTP or CIFS protocols as a shared network drive. The contents of each Professional Disc appear as a subfolder of the shared drive. The PDJ-CS10 software application provides powerful disc capacity management, automatically storing clips to an available Professional Disc of the appropriate video format and with available free disc space.

Quick restores from archived content
Restoring content from the near-line archive is quicker than with tape. The ultra-reliable robotic loader can select the required disc in less than 30 seconds, and content can be restored from disc to the main news production system twice as fast as real time. The result? A 10-minute piece can be restored from archive and available to on-line users for editing in just over 5 minutes.

Simple, web-based management interface
All file management and system functions – including Disc ID, Title, Bin Number, File and Last Access date – can be reviewed via an easy-to-use browser based interface. This allows the cart operator to quickly search for and identify Professional Discs, with tracking of both near-line discs resident in the PDJ-C1080 or PDJ-A640 robots as well as discs moved off-line to shelf storage.



System Requirements

The following environment is recommended for PDJ-CS10.

CPU: Intel Pentium 4, or Xeon, 2.8GHz over.
Memory: 2GB
HDD: 1st 80GB, 2nd 250GB
Network: 1000Base-T
OS: Preinstall Red Hat(R) Enterprise Linux ES 3 (32bit)
DB: Oracle 10g Standard Edition One
for Linux (x86) Release 1 (10.1.0) Distribution Package

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DVW-970P Digital Betacam Camcorder

Features

Superb picture quality of the Digital Betacam format
 Power HAD EX CCD •14-bit A/D conversion and
 Advanced Digital Signal Processing (ADSP) •High-quality
 digital audio: four-channels, 20-bit/48 kHz •Long
 recording time of 40 minutes on an S cassette •Compact
 and lightweight: 5.4 kg (11 lb 14 oz) including the VF,
 microphone, tape, and BP-GL95 battery •Low power
 consumption of approximately 29 W •Stereo audio output
 •Camera remote control using RM-B150/B750
 •Dual optical filters plus electric colour correction
 •Battery-remaining display on viewfinder •Assignable
 functions •Intelligent light system •Turbo gain: max. +48
 dB •Adjustable shoulder pad •Slot for WRR-855 series
 wireless microphone receiver •Memory Stick system
 stores camera setup parameters •Film-like images with
 progressive mode •Slow shutter mode: max. 16 frames
 •Picture cache and interval recording (the optional
 CBK-MB01 required) •Selectable gamma table including
 film-like gamma •TruEye processor •Adaptive highlight
 control •Triple skin tone detail control •Variable black
 gamma range •Auto-Tracing White balance (ATW)
 •Multi-Matrix function •Electronic soft focus •Colour
 temperature control •Essence Mark and UMID handling



Supplied Accessories

Operation manual (1)
 Viewfinder (1)
 Lens cap (1)
 Shoulder belt (1)
 Monaural microphone (1)

Optional Accessories

CBK-SD01 SDI Output Board
 CBK-MB01 Picture Cache Board
 BKW-401 Viewfinder Rotation Bracket
 RM-B150 Remote Control Unit
 RM-B750 Remote Control Unit
 AC-DN2B AC Adaptor
 AC-DN10 AC Adaptor/Charger
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BP-L60S Rechargeable Lithium-ion Battery Pack
 BP-L80S Rechargeable Lithium-ion Battery Pack
 BC-L70 Li-ion Battery Charger
 BC-L500 Li-ion Battery Charger
 BC-M150 Ni-MH & Li-ion Battery Charger
 VCT-14 Tripod Adaptor
 BCT-D Series Digital BETACAM Tapes
 "Memory Stick" IC Memory Media
 ECM-678 Electret Condenser Microphone
 ECM-674 Electret Condenser Microphone
 WLL-CA50 Wireless Camera Transmitter
 WLL-RX55 Wireless Camera Receiver
 WRR-855B UHF Synthesized Diversity Tuner
 WRR 862B UHF Synthesized Dual Diversity Tuner

Digital Betacam

Specifications

General

- Power requirements
 - DC 12 V +5.0 V/-1.0 V
- Power consumption
 - 29 W (with DC 12 V power supply, REC mode, with viewfinder)
- Operating temperature
 - 0 to +40 °C (+32 to +104 °F)
- Storage temperature
 - 20 to +60 °C (-4 to +140 °F)
- Operating humidity
 - 25 to 85% (relative humidity)
 - Approx. 3.7 kg (8 lb 3 oz)
 - Approx. 5.4 kg (11 lb 14 oz)
 - (with viewfinder, microphone, BP-GL95 battery, BCT-D40 tape)
 - 20 °C to +60 °C (-4 °F to +140 °F)
- Continuous operating time
 - Approx. 170 min. with BP-GL95 battery at 25 °C (77 °F), REC mode

Signal inputs/outputs

- Genlock video input
 - BNC type (1), 1.0 Vp-p, 75 Ω
- Audio input (CH-1/2)
 - XLR-3-31 type (2), -60/-50/-40/+4 dBu ^(*)
 - selectable, high impedance, balanced
- Microphone input
 - XLR-3-31 type (1), -60/-50/-40 dBu ^(*)
- Time code input
 - BNC type (1), 0.5 to 18 Vp-p, 10 kΩ
- Analogue composite output
 - BNC type (1), 1.0 Vp-p, 75 Ω
- SDI output
 - BNC type (1), 0.8 Vp-p, 75 Ω
 - (the optional CBK-SD01 is required)
- Video test output
 - BNC type (1), 1.0 Vp-p, 75 Ω
- Audio output (CH-1/2)
 - XLR-5-pin, male (stereo)
- Time code output
 - BNC type (1), 1.0 Vp-p, 75 Ω
- Earphone output
 - Mini-jack (2)

Other inputs/outputs

- Lens
 - 12-pin
- VF
 - 20-pin
- Remote
 - 8-pin
- Wireless microphone
 - D-Sub 15-pin
- Light
 - 2-pin, DC 12 V, max. 50 W
- DC input
 - 4-pin (for wireless microphone receiver), DC 12 V (max. 0.1 A)
- DC output
 - 4-pin (for wireless microphone receiver), DC 12 V (max. 0.1 A)
- Battery terminal
 - 5-pin
- Camcorder adaptor
 - 40-pin

Camera section

- Pickup device
 - Pickup device
 - 3-chip 2/3-inch type Power HAD EX CCD
- Aspect ratio
 - 16:9/4:3 switchable
- Total picture elements (H x V)
 - 1038 x 1188

Effective picture elements (H x V)

980 x 1164

Optical system

- Spectral system
 - F1.4 prism (with quartz filter)
- Built-in filters

1: Clear, 2: 1/4ND, 3: 1/16ND,
4: 1/64ND, A: CROSS, B: 3200K,
C: 4300K, D: 6300K

Lens mount

2/3-inch type Sony bayonet mount

Electrical characteristics

Scan format

625/50i, 625/25p

A/D conversion

14 bits

Sensitivity

F11 (typical)
(2000 lx, 89.9% reflectance)

Minimum illumination

0.008 lx (F1.4 lens, +48 dB gain,
with slow shutter mode at 16-frame
accumulation)

Smear level

-145 dB (typical)

Video S/N ratio

63 dB (typical)

Vertical resolution

480 TV lines (with EVS) and
530 TV lines (without EVS) at
625/50i mode
575 TV lines at 625/25p mode

Shutter speed

1/60, 1/125, 1/250, 1/500, 1/1000,
1/2000 s at 625/50i mode
1/33, 1/50, 1/100, 1/125, 1/250,
1/500, 1/1000, 1/2000 s at
625/25p mode

ECS

50 to 6000 Hz at 625/50i mode
25 to 6000 Hz at 625/25p mode

Slow shutter

1/25, 1/12.5, 1/8.3, 1/6.3, 1/5, 1/4.2,
1/3.6, 1/3.1, 1/1.6 s (1 to 8, 16 frames)

Gain selection

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42,
48 dB (for GAIN LOW, GAIN MID,
GAIN HIGH and GAIN TURBO positions)

Registration

0.05% (all zones, without lens)

Warm-up time

2 s

Modulation depth at 5 MHz

70% (16:9 typical)/55% (4:3 typical)

VTR Section

Recording format

Video

Digital BETACAM

Audio

4 ch/20 bits/48 kHz

Tape speed

96.7 mm/s

Record/playback time

Approx. 5 min (with the BCT-D40 cassette)

Rewind time

Approx. 5 min (with the BCT-D40 cassette)

Recommended recording media

Sony Digital Betacam S cassette:
BCT-D6/D12/D22/D32/D40

Sampling frequency

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization

10 bits/sample

Digital video performance

K-factor (2T pulse)

Less than 1%

Y/C delay

Less than 15 ns

Digital audio performance ^(*)

Frequency response

20 Hz to 20 kHz, +0.5/-0.8 dB

Dynamic range

More than 85 dB (emphasis on)

Distortion (at 1 kHz, emphasis ON, reference level)

Less than 0.08%

Cross talk (at 1 kHz, reference level)

Less than -70 dB

Wow & flutter

Below measurable limit

Headroom

20 dB (ex-factory setting)

Viewfinder

CRT

2.0-inch type monochrome

Controls

BRIGHT, CONTRAST, PEAKING controls,
TALLY, ZEBRA, DISPLAY switches

Horizontal resolution

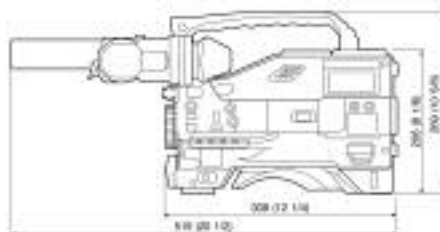
450 TV lines (16:9)/600 TV lines (4:3)

Microphone

Electret condenser microphone
(Ultra-directional) (detachable)

(*) 0 dBu=0.775 Vrms.

(*) The specifications given above were
measured via CBK-SD01 SDI Output
Board.



Unit: mm (inch)

DVW-M2000 Digital Betacam Recorder

Features

- Superb picture quality and high sound quality of Digital Betacam format
- Powerful legacy playback capability of MPEG IMX, Betacam SX, Betacam SP and Betacam as well as Digital Betacam format
- HD upconversion output capability (1080/59.94i, 720/59.94p)(option: *1)
- Compact 4U height design and light weight
- High-quality four-channel 20-bit digital audio
- Long recording time of 124 minutes on an L-cassette and 40 minutes on an S-cassette
- Versatile interfaces including SDI I/O, analogue component I/O, digital and analogue audio I/O, time code I/O, analogue composite I/O and 50-pin parallel remote interface as standard
- Frame-accurate insert/assemble editing
- Pre-read editing capability
- Digital audio jog sound
- High-speed picture search
- Variable speed playback
- Dynamic Motion Control (DMC) functionality
- Easy setup using "Memory Stick" media
- Shot mark handling
- UMID handling
- Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached
- Optional remote control panel BKDW-101
- Built-in signal generator
- Can be installed in LMS and Flexicart systems



Supplied Accessories

PSW 4x16 rack mount screws (4)

Operation manual (1)

Installation manual (1)

Optional Accessories

BKDW-101 Remote Control Panel

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

BKMW-104 HD Up-converter Board (*1)

RCC-G Cables 9-pin/9-pin Cable

RMM-131 Rack Mount Kit

MSA-A "Memory Stick" IC Memory Media

BCT-D tapes BCT-D Series Digital Betacam Tapes

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5°C to +40°C (+41°F to +104°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

Humidity:

20% to 90% (relative humidity)

Mass:

23.5 kg (52 lb 11 oz)

Dimensions (W x H x D):

427 x 174 x 544 mm (16 7/8x 6 7/8x 21 1/2 inches)

Tape speed

Digital BETACAM:

96.7 mm/s

MPEG IMX:

64.467 mm/s

BETACAM SX:

59.515 mm/s

BETACAM/BETACAM SP:

118.6 mm/s

Recording/playback time (Digital Betacam):

Max. 124 min with BCT-D124L cassette

Fast forward/rewind time:

Approx. 3 min with BCT-D124L cassette

Search speed range

Digital BETACAM:

±50 times normal playback speed

MPEG IMX:

±78 times normal playback speed

BETACAM SX:

±78 times normal playback speed

BETACAM/BETACAM SP:

±35 times normal playback speed

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analogue composite input:

BNC (x2, including one loop through output), 1.0 Vp-p, 75 Ω, sync negative

Analogue composite output:

BNC (x3, including one character out), 1.0 Vp-p, 75 Ω, sync negative

Analogue component input:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analogue component output:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (x2, including one active through out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (x3, including one character out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

HD-SDI output (option):

BNC (x3)

Analogue audio input:

XLR (x4) (4CH: channel selectable)

Analogue audio output:

XLR (x4) (4CH: channel selectable)

Cue audio input:

XLR (x1, only Digital Betacam recording)

Cue audio output:

XLR (x1, only Digital Betacam playback)

Digital audio input:

BNC (x2), 4 channels, AES/EBU, default 48 kHz (32 to 48 kHz with sample rate converter), complies with AES-3id-1995

Digital audio output:

BNC (x4), 8 channels, AES/EBU, 48 kHz fixed, complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (x2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (x1), RS-232C interface

Parallel remote:

D-sub 50-pin (x1)

Video control:

D-sub 15-pin (x1, for connection with BVR-50 Video Controller)

D-sub 9-pin (x1, for connection with HKDV-503/900 Video Controller)

Control panel:

Circular connector 10-pin

Time code input:

XLR (x1)

Time code output:

XLR (x1)

Memory card insertion slot:

Memory Stick slot (x1)

Monitor output L/R:

XLR (x2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/ -∞ to 3 dB selectable

Chroma level:

±3 dB/ -∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Y/C delay:

±100 ns (BETACAM/BETACAM SP playback only)

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analogue component output:

D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 62 dB or more, K-factor (2T pulse): 1% or less

Analogue component input to analogue component output:

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, K-factor (2T pulse): 1% or less, LF non-linearity: 3% or less

Analogue composite input to analogue composite output:

A/D and D/A quantization: 10 bits/sample,

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, Differential gain:

2% or less, Differential phase: 2° or less

Y/C delay: 20 ns or less, K-factor (2T pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Analogue input to analogue output:

Frequency response (0 dB at 1 kHz): 20 Hz to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 95 dB

Distortion (at 1 kHz, emphasis ON,

reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two

channels): Less than -80 dB, Wow & flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

DVW-M2000P Digital Betacam Recorder

Features

- Superb picture quality and high sound quality of Digital Betacam format
- Powerful legacy playback capability of MPEG IMX, Betacam SX, Betacam SP and Betacam as well as Digital Betacam format
- HD upconversion output capability (1080/50i) (option: *1)
- Compact 4U height design and light weight
- High-quality four-channel 20-bit digital audio
- Long recording time of 124 minutes on an L-cassette and 40 minutes on an S-cassette
- Versatile interfaces including SDI I/O, analogue component I/O, digital and analogue audio I/O, time code I/O, analogue composite I/O and 50-pin parallel remote interface as standard
- Frame-accurate insert/assemble editing
- Pre-read editing capability
- Digital audio jog sound
- High-speed picture search
- Variable speed playback
- Dynamic Motion Control (DMC) functionality
- Easy setup using "Memory Stick" media
- Shot mark handling
- UMID handling
- Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached
- Optional remote control panel BKDW-101
- Built-in signal generator
- Can be installed in LMS and Flexicart systems



Supplied Accessories

PSW 4x16 rack mount screws (4)

Operation manual (1)

Installation manual (1)

Optional Accessories

BKDW-101 Remote Control Panel

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

BKMW-104 HD Up-converter Board (*1)

RCC-G Cables 9-pin/9-pin Cable

RMM-131 Rack Mount Kit

MSA-A "Memory Stick" IC Memory Media

BCT-D tapes BCT-D Series Digital Betacam

Tapes

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

220 W

Operating temperature:

+5°C to +40°C (+41°F to +104°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

Humidity:

20% to 90% (relative humidity)

Mass:

23.5 kg (52 lb 11 oz)

Dimensions (W x H x D):

427 x 174 x 544 mm (16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

Digital BETACAM:

96.7 mm/s

MPEG IMX:

53.776 mm/s

BETACAM SX:

59.575 mm/s

BETACAM/BETACAM SP:

101.51 mm/s

Recording/playback time (Digital Betacam):

Max. 124 min with BCT-D124L cassette

Fast forward/rewind time:

Approx. 3 min with BCT-D124L cassette

Search speed range

Digital BETACAM:

±50 times normal playback speed

MPEG IMX:

±78 times normal playback speed

BETACAM SX:

±78 times normal playback speed

BETACAM/BETACAM SP:

±42 times normal playback speed

Servo lock time:

0.7 s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analogue composite input:

BNC (x2), including one loop through output), 1.0 Vp-p, 75 Ω, sync negative

Analogue composite output:

BNC (x3), including one character out), 1.0 Vp-p, 75 Ω, sync negative

Analogue component input:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analogue component output:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (x2, including one active through out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (x3, including one character out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

HD-SDI output (option):

BNC (x3)

Analogue audio input:

XLR (x4) (4CH: channel selectable)

Analogue audio output:

XLR (x4) (4CH: channel selectable)

Cue audio input:

XLR (x1, only Digital Betacam recording)

Cue audio output:

XLR (x1, only Digital Betacam playback)

Digital audio input:

BNC (x2), 4 channels, AES/EBU, default 48 kHz (32 to 48 kHz with sample rate converter), complies with AES-3id-1995

Digital audio output:

BNC (x4), 8 channels, AES/EBU, 48 kHz fixed, complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (x2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (x1), RS-232C interface

Parallel remote:

D-sub 50-pin (x1)

Video control:

D-sub 15-pin (x1, for connection with BVR-50P Video Controller)

D-sub 9-pin (x1, for connection with HKDV-503/900 Video Controller)

Control panel:

Circular connector 10-pin

Time code input:

XLR (x1)

Time code output:

XLR (x1)

Memory card insertion slot:

Memory Stick slot (x1)

Monitor output L/R:

XLR (x2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/ -∞ to 3 dB selectable

Chroma level:

±3 dB/ -∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Y/C delay:

±100 ns (BETACAM/BETACAM SP playback only)

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analogue component output:

D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 62 dB or more, K-factor (2T pulse): 1% or less

Analogue component input to analogue component output:

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, K-factor (2T pulse): 1% or less, LF non-linearity: 3% or less

Analogue composite input to analogue composite output:

A/D and D/A quantization: 10 bits/sample,

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, Differential gain:

2% or less, Differential phase: 2° or less

Y/C delay: 20 ns or less, K-factor (2T pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Analogue input to analogue output:

Frequency response (0 dB at 1 kHz): 20 Hz to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 95 dB

Distortion (at 1 kHz, emphasis ON,

reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two

channels): Less than -80 dB, Wow & flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

DVW-2000 Digital Betacam Recorder

Features

- Superb picture quality and high sound quality of Digital Betacam format
- HD upconversion output capability (1080/59.94i, 720/59.94p) (option: *1)
- Compact 4U height design and light weight
- High-quality four-channel 20-bit digital audio
- Long recording time of 124 minutes on an L-cassette and 40 minutes on an S-cassette
- Versatile interfaces including SDI I/O, analogue component I/O, digital and analogue audio I/O, time code I/O, analogue composite I/O and 50-pin parallel remote interface as standard
- Frame-accurate insert/assemble editing
- Pre-read editing capability
- Digital audio jog sound
- High-speed picture search
- Variable speed playback
- Dynamic Motion Control (DMC) functionality
- Easy setup using "Memory Stick" media
- Shot mark handling
- UMID handling
- Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached
- Optional remote control panel BKDW-101
- Built-in signal generator
- Can be installed in LMS and Flexicart systems



Supplied Accessories

PSW 4x16 rack mount screws (4)

Operation manual (1)

Installation manual (1)

Optional Accessories

BKDW-101 Remote Control Panel

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

BKMW-104 HD Up-converter Board (*1)

RCC-G Cables 9-pin/9-pin Cable

RMM-131 Rack Mount Kit

MSA-A "Memory Stick" IC Memory Media

BCT-D tapes BCT-D Series Digital Betacam

Tapes

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

200 W

Operating temperature:

+5°C to +40°C (+41°F to +104°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

Humidity:

20% to 90% (relative humidity)

Mass:

23.5 kg (52 lb 11 oz)

Dimensions (W x H x D):

427 x 174 x 544 mm (16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

96.7 mm/s

Recording/playback time (Digital Betacam):

Max. 124 min with BCT-D124L cassette

Fast forward/rewind time:

Approx. 3 min with BCT-D124L cassette

Search speed range

±50 times normal playback speed

Servo lock time:

0.5 s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analogue composite input:

BNC (x2, including one loop through output), 1.0 Vp-p, 75 Ω, sync negative

Analogue composite output:

BNC (x3, including one character out), 1.0 Vp-p, 75 Ω, sync negative

Analogue component input:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analogue component output:

BNC (x3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (x2, including one active through out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (x3, including one character out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

HD-SDI output (option):

BNC (x3)

Analogue audio input:

XLR (x4) (4CH: channel selectable)

Analogue audio output:

XLR (x4) (4CH: channel selectable)

Cue audio input:

XLR (x1, only Digital Betacam recording)

Cue audio output:

XLR (x1, only Digital Betacam playback)

Digital audio input:

BNC (x2), 4 channels, AES/EBU, default 48 kHz (32 to 48 kHz with sample rate converter), complies with AES-3id-1995

Digital audio output:

BNC (x2), 4 channels, AES/EBU, 48 kHz fixed, complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (x2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (x1), RS-232C interface

Parallel remote:

D-sub 50-pin (x1)

Video control:

D-sub 15-pin (x1, for connection with BVR-50 Video Controller)

D-sub 9-pin (x1, for connection with

HKDV-503/900 Video Controller)

Control panel:

Circular connector 10-pin

Time code input:

XLR (x1)

Time code output:

XLR (x1)

Memory card insertion slot:

Memory Stick slot (x1)

Monitor output L/R:

XLR (x2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/ -∞ to 3 dB selectable

Chroma level:

±3 dB/ -∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analogue component output:

D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 62 dB or more, K-factor (2T pulse):

1% or less

Analogue component input to analogue component output:

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, K-factor (2T pulse):

1% or less, LF non-linearity: 3% or less

Analogue composite input to analogue composite output:

A/D and D/A quantization: 10 bits/sample,

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, Differential gain:

2% or less, Differential phase: 2° or less

Y/C delay: 20 ns or less, K-factor (2T pulse):

1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Analogue input to analogue output:

Frequency response (0 dB at 1 kHz): 20 Hz to

20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON): More than 95 dB

Distortion (at 1 kHz, emphasis ON, reference

level): Less than 0.05%

Cross talk (at 1 kHz, between any two channels):

Less than -80 dB, Wow & flutter: Below

measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

DVW-2000P Digital Betacam Recorder

Features

- Superb picture quality and high sound quality of Digital Betacam format
- HD upconversion output capability (1080/50i)(option: *1)
- Compact 4U height design and light weight
- High-quality four-channel 20-bit digital audio
- Long recording time of 124 minutes on an L-cassette and 40 minutes on an S-cassette
- Versatile interfaces including SDI I/O, analogue component I/O, digital and analogue audio I/O, time code I/O, analogue composite I/O and 50-pin parallel remote interface as standard
- Frame-accurate insert/assemble editing
- Pre-read editing capability
- Digital audio jog sound
- High-speed picture search
- Variable speed playback
- Dynamic Motion Control (DMC) functionality
- Easy setup using "Memory Stick" media
- Shot mark handling
- UMID handling
- Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached
- Optional remote control panel BKDW-101
- Built-in signal generator
- Can be installed in LMS and Flexicart systems



Supplied Accessories

PSW 4x16 rack mount screws (4)

Operation manual (1)

Installation manual (1)

Optional Accessories

BKDW-101 Remote Control Panel

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

BKMW-104 HD Up-converter Board (*1)

RCC-G Cables 9-pin/9-pin Cable

RMM-131 Rack Mount Kit

MSA-A "Memory Stick" IC Memory Media

BCT-D tapes BCT-D Series Digital BETACAM

Tapes

Specifications

General

Power requirements:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

200 W

Operating temperature:

+5°C to +40°C (+41°F to +104°F)

Storage temperature:

-20°C to +60°C (-4°F to +140°F)

Humidity:

20% to 90% (relative humidity)

Mass:

23.5 kg (52 lb 11 oz)

Dimensions (W x H x D):

427 x 174 x 544 mm (16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

96.7 mm/s

Recording/playback time (Digital Betacam):

Max. 124 min with BCT-D124L cassette

Fast forward/rewind time:

Approx. 3 min with BCT-D124L cassette

Search speed range

±50 times normal playback speed

Servo lock time:

0.7 s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analogue composite input:

BNC (x2, including one loop through output),
1.0 Vp-p, 75 Ω, sync negative

Analogue composite output:

BNC (x3, including one character out), 1.0 Vp-p,
75 Ω, sync negative

Analogue component input:

BNC (x3, for 1 set, Y/R-Y/B-Y): 1.0 Vp-p, 75 Ω,
sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analogue component output:

BNC (x3, for 1 set, Y/R-Y/B-Y): 1.0 Vp-p, 75 Ω,
sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (x2, including one active through out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (x3, including one character out), SMPTE
259M (ITU-R BT.656-3), 270 Mb/s

HD-SDI output (option):

BNC (x3)

Analogue audio input:

XLR (x4) (4CH: channel selectable)

Analogue audio output:

XLR (x4) (4CH: channel selectable)

Cue audio input:

XLR (x1, only Digital Betacam recording)

Cue audio output:

XLR (x1, only Digital Betacam playback)

Digital audio input:

BNC (x2), 4 channels, AES/EBU, default 48 kHz
(32 to 48 kHz with sample rate converter),
complies with AES-3id-1995

Digital audio output:

BNC (x2), 4 channels, AES/EBU, 48 kHz fixed,
complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (x2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (x1), RS-232C interface

Parallel remote:

D-sub 50-pin (x1)

Video control:

D-sub 15-pin (x1, for connection with
BVR-50P Video Controller)

D-sub 9-pin (x1, for connection with
HKDV-503/900 Video Controller)

Control panel:

Circular connector 10-pin

Time code input:

XLR (x1)

Time code output:

XLR (x1)

Memory card insertion slot:

Memory Stick slot (x1)

Monitor output L/R:

XLR (x2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/ -∞ to 3 dB selectable

Chroma level:

±3 dB/ -∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

10 bits/sample

Error correction:

Reed-Solomon code

Digital input to analogue component output:

D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 62 dB or more, K-factor (2T pulse):

1% or less

Analogue component input to analogue component output:

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, K-factor (2T pulse):

1% or less, LF non-linearity: 3% or less

Analogue composite input to analogue composite output:

A/D and D/A quantization: 10 bits/sample,

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more, Differential gain:

2% or less, Differential phase: 2° or less

Y/C delay: 20 ns or less, K-factor (2T pulse):

1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

20 bits/sample

Analogue input to analogue output:

Frequency response (0 dB at 1 kHz): 20 Hz to

20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 95 dB

Distortion (at 1 kHz, emphasis ON, reference

level): Less than 0.05%

Cross talk (at 1 kHz, between any two channels):

Less than -80 dB, Wow & flutter: Below

measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

J-30 1/2" Standard Definition Compact Player

The J-30 Compact Player is an affordable, compact office viewer for producers, journalists and production staff. The J-30 has been designed for viewing and logging of tapes and feeding material to non-linear editing systems. It has analogue composite and component video outputs, and an optional i.LINK output board can be installed for output of DV from Betacam-family tapes.

Features

- DV-device connectivity
- Powerful playback capability (Betacam, Betacam SP, Betacam SX, MPEG IMX and Digital Betacam formats)
- Compact body design
- Replay of both small and large cassettes
- 525/625 versatility
- Analogue component output
- Supports wireless infrared remote controller
- Flexible audio outputs



Supplied Accessories

Infrared Remote Controller (1)

Specifications

General

Power requirement:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

55 W

Operating temperature:

+5 °C to +40 °C (+41 °F to +104 °F)

Humidity:

25% to 80% (relative humidity)

Mass:

8.2 kg (18 lb 1 oz)

Dimension (W x H x D):

307 x 100 x 397 mm (12 1/8 x 4 x 15 3/4 inches)

Tape speed:

Digital Betacam: 96.7 mm/s

MPEG IMX: 64.467 mm/s (525 mode),

53.776 mm/s (625 mode)

Betacam SX: 59.515 mm/s (525 mode),

59.575 mm/s (625 mode)

Betacam/Betacam SP: 118.6 mm/s,

101.5 mm/s (625 mode)

Playback time:

Digital Betacam: Max. 124 min. with

BCT-D124L

MPEG IMX: Max. 184 min. (525 mode)/220

min. (625 mode) with BCT-184MXL

Betacam SX: Max. 194 min. with

BCT-194SXL

Betacam/Betacam SP: Max. 90 min. (525

mode)/108 min. (625 mode) with

BCT-90MLA

Fast forward/rewind:

Digital Betacam: Approx. 5 min. with

BCT-D124L

MPEG IMX: Approx. 5 min. with

BCT-184MXL

Betacam SX: Approx. 5 min. with

BCT-184SXL

Betacam/Betacam SP: Approx. 5 min. with

BCT-90MLA

Search speed range:

Digital Betacam: ± 21 times normal

playback speed

MPEG IMX: ± 32 times normal playback

speed

Betacam SX: ± 35 times normal playback

speed

Betacam/Betacam SP: ± 18 times (525

mode), ± 20 times (625 mode) normal

playback speed

Servo lock time:

1.5 s or less (from standby on)

Load/unload time:

7 s or less

Input signal

Ext. sync:

BNC (x 1), Frame lock

Output signal

Analogue composite:

BNC (x 1), Pin Jack (x 1), 1.0 Vp-p, 75 Ω

S-video output:

Mini DIN 4-pin (x 1), Y: 1.0 Vp-p, C: 0.286

Vp-p burst, 75 Ω

Analogue component output:

BNC (x 3), Y: 1.0 Vp-p, R-Y/B-Y: 0.7 Vp-p,

75 Ω

i.LINK (DV) output:

6-pin (x 1), IEEE 1394

Monitor output L/R:

Pin Jack (x 2): -10 dBu at 47 k Ω load,

unbalanced, XLR (male x 2): +4 dBm, 600

Ω load, low impedance, balanced

Headphone output:

JM-60 Stereo Phone Jack, $-\infty$ to -12 dBu at

8 Ω load, unbalanced

Remote Control

RS-422A:

D-sub 9-pin (female) (x 1), Sony 9-pin

remote interface

RS-232C:

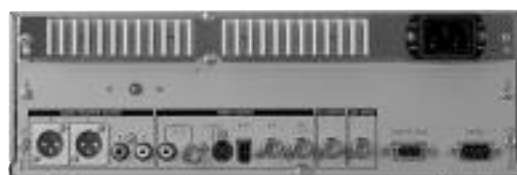
D-sub 9-pin (male) (x 1)

Wireless:

SIRCS

J-30/SDI 1/2" Standard Definition Compact Player

The J-30/SDI Compact Player is an affordable, compact office viewer for producers, journalists and production staff. The J-30/SDI has been designed for viewing and logging of tapes and feeding material to non-linear editing systems. It has analogue composite and SDI video outputs, and an optional i.LINK output board can be installed for output of DV from Betacam-family tapes.



Features

- DV-device connectivity
- Powerful playback capability (Betacam, Betacam SP, Betacam SX, MPEG IMX and Digital Betacam formats)
- Compact body design
- Replay of both small and large cassettes
- 525/625 versatility
- SDI outputs (x 2)
- Supports wireless infrared remote controller
- Flexible audio outputs
- UMID and Essence mark readable

Supplied Accessories

Infrared Remote Controller (1)

Specifications

General

Power requirement:

AC 100 V to 240 V, 50/60 Hz

Power consumption:

55 W

Operating temperature:

+5 °C to +40 °C (+41 °F to +104 °F)

Humidity:

25% to 80% (relative humidity)

Mass:

8.2 kg (18 lb 1 oz)

Dimension (W x H x D):

307 x 100 x 397 mm (12 1/8 x 4 x 15 3/4 inches)

Tape speed:

Digital Betacam: 96.7 mm/s

MPEG IMX: 64.467 mm/s (525 mode),

53.776 mm/s (625 mode)

Betacam SX: 59.515 mm/s (525 mode),

59.575 mm/s (625 mode)

Betacam/Betacam SP: 118.6 mm/s,

101.5 mm/s (625 mode)

Playback time:

Digital Betacam: Max. 124 min. with

BCT-D124L

MPEG IMX: Max. 184 min. (525 mode)/220

min. (625 mode) with BCT-184MXL

Betacam SX: Max. 194 min. with

BCT-194SXL

Betacam/Betacam SP: Max. 90 min. (525

mode)/108 min. (625 mode) with

BCT-90MLA

Fast forward/rewind:

Digital Betacam: Approx. 5 min. with

BCT-D124L

MPEG IMX: Approx. 5 min. with

BCT-184MXL

Betacam SX: Approx. 5 min. with

BCT-184SXL

Betacam/Betacam SP: Approx. 5 min. with

BCT-90MLA

Search speed range:

Digital Betacam: ± 21 times normal

playback speed

MPEG IMX: ± 32 times normal playback

speed

Betacam SX: ± 35 times normal playback

speed

Betacam/Betacam SP: ± 18 times (525

mode), ± 20 times (625 mode) normal

playback speed

Servo lock time:

1.5 s or less (from standby on)

Load/unload time:

7 s or less

Input signal

Ext. sync:

BNC (x 1), Frame lock

Output signal

Analogue composite:

BNC (x 1), Pin Jack (x 1), 1.0 Vp-p, 75 Ω

S-video output:

Mini DIN 4-pin (x 1), Y: 1.0 Vp-p, C: 0.286

Vp-p burst, 75 Ω

SDI output:

BNC (x 2), SMPTE 259M, 270 Mb/s, 0.8

Vp-p, 75 Ω

i.LINK (DV) output:

6-pin (x 1), IEEE 1394

Time Code output:

BNC (x 1), 1.0 Vp-p, 75 Ω , unbalanced

Monitor output L/R:

Pin Jack (x 2): -10 dBu at 47 k Ω load,

unbalanced, XLR (male x 2): +4 dBm, 600

Ω load, low impedance, balanced

Headphone output:

JM-60 Stereo Phone Jack, $-\infty$ to -12 dBu at

8 Ω load, unbalanced

Remote Control

RS-422A:

D-sub 9-pin (female) (x 1), Sony 9-pin

remote interface

RS-232C:

D-sub 9-pin (male) (x 1)

Wireless:

SIRCS

SONY

MSW-970P 188
MSW-M2000P/1 190
MSW-A2000P/1 192
MSW-2000 194
MSW-M2100P/1 196

MSW-970P MPEG IMX Camcorder

Features

- High Picture Quality using MPEG-2 4:2:2P@ML 50 Mb/s I-frame Compression
- Power HAD EX CCD
- Advanced Digital Signal Processing (ADSP)
- 14-bit A/D Conversion
- Long Recording Time of up to 71 minutes on s-cassette
- High-quality Digital Audio Recordings
- User-friendly Menu Controls
- Rugged and Ergonomic Design
- Compact, Lightweight and Low Power Consumption
- Versatile Interfaces
- Camera Remote Control
- Dual Optical Filters Plus Electric Colour Correction
- Assignable Functions
- Battery Remaining Display on Viewfinder
- Intelligent Light System
- Slot-in Mechanism for Wireless Microphone Receiver
- Turbo Gain
- Memory Stick System for storage of Camcorder Setup Parameters
- Adjustable Shoulder Pad
- Film-like Images with Progressive Mode
- Slow Shutter function
- Picture Cache Recording
- Interval Recording
- TruEye Processor
- Adaptive Highlight Control
- Selectable Gamma Table Including Film-like Gamma
- Triple Skin Tone Detail Control
- Variable Black Gamma Range
- Auto Tracing White Balance (ATW)
- Multi-matrix Function
- Electronic Soft Focus
- Colour Temperature Control
- UMID[†] Recording
- Essence Mark Handling
- Tele-File System

[†]1 UMID is recognized as a standard under SMPTE 330M.



Supplied Accessories

Operation manual (1)
 XLR connector cap (4)
 Viewfinder (1)
 Lens cap (1)
 Shoulder belt (1)
 Monaural microphone (1)

Optional Accessories

CBK-SD01 SDI Output Board
 MSDW-903 Picture Cache Board
 MSDW-904 Analogue Composite Input Board
 BKW-401 Viewfinder Rotation Bracket
 RM-B150 Remote Control Unit
 RM-B750 Remote Control Unit
 AC-DN2B AC Adaptor
 AC-DN10 AC Adaptor/Charger
 BP-GL65 Rechargeable Lithium-ion Battery Pack
 BP-GL95 Rechargeable Lithium-ion Battery Pack
 BP-L60S Rechargeable Lithium-ion Battery Pack
 BP-L80S Rechargeable Lithium-ion Battery Pack
 BC-L70 Li-ion Battery Charger
 BC-M150 Ni-MH & Li-ion Battery Charger
 MSH "Memory Stick" IC Memory Media
 BCT-MX Series MPEG IMX Tapes
 VCT-14 Tripod Adaptor
 WRR-855B UHF Synthesized Diversity Tuner
 WRR-862B UHF Synthesized Dual Diversity Tuner
 ECM-674 Electret Condenser Microphone
 ECM-678 Electret Condenser Microphone
 WLL-RX55 Wireless Camera Receiver
 WLL-CA50 Wireless Camera Transmitter (CER)
 LC-DN7 Hard Carrying Case

Specifications

General

Mass

Approx. 3.7 kg (8 lb 3 oz)
5.4 kg (with VF, Mic, BCT-60MX, BP-GL95)
(11 lb 14 oz)

Power requirements

DC 12 V +5.0 V/-1.0 V

Power consumption

Approx. 27 W (with DC 12V power supply,
REC mode with VF)

Operating temperature

0 to 40 °C (+32 °F to +104 °F)

Storage temperature

-20 to +60 °C (-4 °F to +140 °F)

Humidity

25 to 85% (relative humidity)

Continuous operating time

Approx. 180 min with BP-GL95 battery at 25 °C
(77 °F), REC mode

Signal inputs

Genlock video

BNC type x1, 1.0 Vp-p, 75 Ω

Time code input

BNC type x1, 0.5 to 18 Vp-p, 10 k Ω

Video outputs

SDI

BNC type x1, 0.8 Vp-p, 75 Ω
(with the CBK-SD01)

Audio input (CH-1/2)

XLR-3-31 type x2, -60/-50/+4 dBu selectable,
high impedance, balanced
(0 dBu = 0.775 Vrms.)

Mic input

XLR-3-31 type x1, -60/-50 dBu

Signal outputs

Video output (Analogue composite)

BNC type x1, 1.0 Vp-p, 75 Ω

Video test output

BNC type x1, 1.0 Vp-p, 75 Ω

Time code output

BNC type x1, 1.0 Vp-p, 75 Ω

Earphone

Minijack x2

Audio output (CH-1/CH-2)

XLR-5-pin male (stereo)

Others

Lens

12-pin

VF

20-pin

Remote

8-pin

Light

2-pin, DC 12 V, max. 50 W

DC input

XLR-4-pin (male, DC 11 to 17V)

DC output

4-pin (for wireless microphone receiver),
DC 12 V (max. 0.1 A)

Battery terminal

5-pin

Wireless receiver input

D-Sub 15-pin

VTR section

Recording Format

Video

MPEG IMX (50/40/30 Mb/s)

Audio

4 ch/16 bits/48 kHz, 4 ch/20 bits/48 kHz

Tape speed

64.467 mm/s

Playback/Recording time

Max. 71 min. with BCT-60MX cassette

Fast forward time

Approx. 5 min. with BCT-60MX

Rewind time

Approx. 5 min. with BCT-60MX

Recommended tape

Sony MPEG IMX S cassette
(BCT6MX/12MX/22MX/32MX/60MX)

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

8 bits/sample

K-factor (2T pulse)

Less than 1%

Y/R-Y/B-Y delay

Less than 15 ns

Digital audio performance^{*}

Sampling frequency:

48 kHz (synchronised with video)

Quantization:

20/16bits/ sample (selectable)

Frequency response:

20 Hz to 20 kHz, +0.5 dB/-1.0 dB

Dynamic range:

More than 85 dB (emphasis ON)

Distortion (at 1 kHz, emphasis ON, reference level)

Less than 0.08%

Cross talk (at 1 kHz, reference level)

Less than -70 dB

Wow & flutter

Below measurable limit

Head room:

20 dB (ex-factory setting)

Camera section

Pickup device:

3-chip 2/3-inch type Power HAD EX CCD

Aspect ratio

16:9/4:3 switchable

Total picture elements

1038 (H) x 1188 (V)

Optical system

F1.4 prism (with quartz filter)

Built-in optical filters

1: Clear, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND,
A: CROSS, B: 3200K, C: 4300K, D: 6300K

Lens mount

2/3 inche type Sony bayonet mount

Scan format

625/50i, 625/25p

Sensitivity (2000 lx, 89.9% reflectance)

F11 (typical) (2000 lx, 89.9% reflectance)

Minimum illumination

0.008 lx (F1.4 lens, +48 dB gain, with slow
shutter mode at 16-frame accumulation)

Smear level

-145 dB (typical)

Video S/N ratio

63 dB (typical)

Vertical resolution

480 TV lines (with EVS) and 530 TV lines

(without EVS) at 625/50i mode

575 TV lines at 625/25p mode

Shutter speed

1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 s at
625/50i mode 1/33, 1/50, 1/100, 1/125, 1/250,
1/500, 1/1000, 1/2000 s at 625/25p mode

ECS

50 to 6000 Hz at 625/50i mode, 25 to 6000 Hz
at 625/25p mode

Slow shutter

1/25, 1/12.5, 1/8.3, 1/6.3, 1/5, 1/4.2, 1/3.6, 1/3.1,
1/1.6 s (1 to 8, 16 frames)

Gain selection

-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB
(for GAIN LOW, GAIN MID, GAIN HIGH and
GAIN TURBO positions)

Registration

0.05% (all zones without lens)

Warm-up time

2 s

Modulation depth at 5MHz

70% (16:9, typical) /55% (4:3, typical)

Viewfinder

CRT

2.0-inch type monochrome

Controls

BRIGHT, CONTRAST, PEAKING controls, TALLY,
ZEBRA, DISPLAY switches

Horizontal resolution

450 TV lines (16:9)

Microphone

Electret condenser microphone
(Ultra-directional) (Detachable)

^{*} The specifications given for digial audio performance
were measured via CA-701/702 Camcorder Adaptor or
MSDW-902 SDI output board.

MSW-M2000P/1 MPEG IMX Recorder

Features

- Superb picture quality and high sound quality of MPEG IMX format
- 8-bit 4:2:2 component digital recording
- MPEG-2 4:2:2P@ML data compression at 50 Mb/s
- SDTI-CP^(*) output allows interface with SDTI-CP equipped devices such as servers, non-linear editors
- Data transfer at up to twice normal speed as standard
- Legacy playback of MPEG IMX, Digital Betacam, Betacam SX, Betacam SP and Betacam formats
- IP-network interface to allow audio and video materials to be sent and received across a standard network (option: *2)
- HD upconversion output capability (1080/59.94i, 1080/50i and 720/59.94p)(option: *3)
- Frame-accurate insert/assemble editing
- Pre-read editing capability
- Eight channels of 16-bit digital audio or four channels of 24-bit digital audio
- 525/625 switchable operation
- Variable speed control
- High speed colour picture search
- Dynamic Motion Control (DMC)
- Long recording and playback time of up to 184 minutes on L-cassette, 60 minutes on S-cassette
- Compact 4U-height design
- Versatile interfaces; analogue composite I/O, analogue component I/O, SDI I/O, SDTI-CP I/O, analogue audio (4-ch), AES/EBU digital audio (16 bit-8ch/24 bit-4ch), and audio monitor (2-ch)
- Easy setup using "Memory Stick" media
- Shot mark handling
- UMID handling
- Built-in Tele-File reader/writer module to read and write information onto and from a cassette with an optional Tele-File label attached
- Automatic scene change detect function
- Optional remote control panel BKMW-101

(*)1 Serial Data Transport Interface-Content Packages (*)2 Requires optional BKMW-E3000 Network Interface Board (*)3 Requires optional BKMW-104 HD Upconverter Board.

Supplied Accessories

PSW 4x16 rack mount screws (4)

Operation manual (1)

Installation manual (1)

Optional Accessories

BKMW-101 Remote Control Panel

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

BKMW-104 HD Up-converter Board

BKMW-E3000 Network Interface Board

(option for e-VTR)

RCC-G Cables 9-pin/9-pin Cable

RMM-131 Rack Mount Kit

MLB-1M-100 Tele-File Memory Label

BCT-MX tapes BCT-MX Series MPEG IMX

Tapes

MSA-A "Memory Stick" IC Memory Media



Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

2A (200 W) / AC 240 V

Operating temperature:

+5 to +40 °C (+41 to +104 ° F)

Storage temperature:

-20 to +60 °C (-4 to +140 ° F)

Humidity:

20 to 90% (relative humidity)

Mass:

23.0 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7 / 8 x 6 7 / 8 x 21 1 / 2 inches)

Tape speed

MPEG IMX:

64.467 (525)/53.776 (625) mm/s

Digital Betacam:

96.7 mm/s

Betacam SX:

59.515 (525)/59.575 (625) mm/s

Betacam/Betacam SP:

118.6 (525)/101.51 (625) mm/s

Recording/playback time:

Max. 184 (525)/220 (625) min with

BCT-184MXL cassette

Fast forward/rewind time:

Approx. 3.5 min with BCT-184MXL cassette

Search speed range

MPEG IMX:

±78 times normal playback speed

Digital Betacam:

±50 times normal playback speed

Betacam SX:

±78 times normal playback speed

Betacam/Betacam SP:

±35 (525)/±42 (625) times normal playback speed

Servo lock time:

0.5 (525)/0.7 (625) s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analogue composite input:

BNC (2, including one loop through output), 1.0 Vp-p, 75 Ω, sync negative

Analogue composite output:

BNC (3, including one character out), 1.0 Vp-p, 75 Ω, sync negative

Analogue component input:

BNC (x 3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analogue component output:

BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (2, including one active through out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (3, including one character out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDTI-CP input:

BNC (1), SMPTE 326M (SDTI-CP)

SDTI-CP output:

BNC (2), SMPTE 326M (SDTI-CP)

HD-SDI output (requires optional BKMW-104 board):

BNC (3)

Analogue audio input:

XLR (4) (4CH: channel selectable)

Analogue audio output:

XLR (4) (4CH: channel selectable)

Cue audio output (only Digital Betacam

playback):

XLR (1)

Digital audio input (CH 1/2, 3/4, 5/6, 7/8),

AES/EBU:

BNC (4), default 48 kHz (32 to 48 kHz with sample rate converter), complies with AES-3id-1995

Digital audio output (CH 1/2, 3/4, 5/6, 7/8),

AES/EBU:

BNC (4), 48 kHz fixed, Complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (1), RS-232C interface

Parallel remote:

D-sub 50-pin (1)

Video control (1):

D-sub 15-pin (1)

Control panel:

Circular connector 10-pin

Time code input:

XLR (1)

Time code output:

XLR (1)

Ethernet I/F (requires optional BKMW-E3000 board):

RJ-45 connector (1),

1000Base-T/100Base-TX/10Base-T

Memory card insertion slot:

Memory Stick (1), PCMCIA (1)

Monitor output L/R:

XLR (2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/-∞ to 3 dB selectable

Chroma level:

±3 dB/-∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Y/C delay:

±100 ns (Betacam/Betacam SP playback only)

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

MPEG IMX/Betacam SX: 8 bits/sample

Error correction:

Reed-Solomon code

Digital input to analogue component output:

D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz ±0.5 dB

S/N ratio: 56 dB or more K-factor (2T pulse): 1% or less

Analogue component input to analogue

component output (MPEG IMX

record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more K-factor (2T

pulse): 1% or less LF non-linearity: 3.0% or less

Analogue composite input to analogue

composite output (MPEG IMX

record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 53 dB or more Differential gain:

2% or less Differential phase: 2° or less

Y/C delay: 20 ns or less K-factor (2T

pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

MPEG IMX: 16 or 24 bits/sample

(selectable)

Betacam SX: 16 bits/sample

Analogue input to analogue output

(MPEG IMX record/playback):

A/D and D/A quantization: 24 bits/sample

Frequency response (0 dB at 1kHz): 20 Hz

to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 90 dB (16 bits mode), More than

95 dB (24bits mode)

Distortion (at 1 kHz, emphasis ON,

reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two

channels): Less than -80 dB

Wow and flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

MSW-A2000P/1 MPEG IMX Recorder

Features

- Superb picture quality and high sound quality of MPEG IMX format
- 8-bit 4:2:2 component digital recording
- MPEG-2 4:2:2P@ML data compression at 50 Mb/s
- SDTI-CP(*1) output allows interface with SDTI-CP equipped devices such as servers, non-linear editors
- Data transfer at up to twice normal speed as standard
- Legacy playback capability of MPEG IMX, Betacam SX, Betacam SP and Betacam formats
- IP-network interface to allow audio and video materials to be sent and received across a standard network (option: *2)
- HD upconversion output capability (1080/59.94i, 1080/50i and 720/59.94p) (option: *3)
- Frame-accurate insert/assemble editing
- Pre-read editing capability
- Eight channels of 16-bit digital audio or four channels of 24-bit digital audio
- 525/625 switchable operation
- Variable speed control
- High speed colour picture search
- Dynamic Motion Control (DMC)
- Long recording and playback time of up to 184 minutes on L-cassette, 60 minutes on S-cassette
- Compact 4U-height design
- Versatile interfaces; analogue composite I/O, analogue component I/O, SDI I/O, SDTI-CP I/O, analogue audio (4-ch), AES/EBU digital audio (16 bit-8ch/24 bit-4ch), and audio monitor (2-ch)
- Easy setup using "Memory Stick" media
- Shot mark handling
- UMID handling
- Built-in Tele-File reader/writer module to read and write information onto and from a cassette with an optional Tele-File label attached
- Automatic scene change detect function
- Optional remote control panel BKMW-101

(*1) Serial Data Transport Interface-Content Packages (*2) Requires optional BKMW-E3000 Network Interface Board (*3) Requires optional BKMW-104 HD Upconverter Board.



Supplied Accessories

PSW 4x16 rack mount screws (4)

Operation manual (1)

Installation manual (1)

Optional Accessories

BKMW-101 Remote Control Panel

BKMW-102 Remote Control Unit

BKMW-103 Control Panel Extension Kit

BKMW-104 HD Up-converter Board

BKMW-E3000 Network Interface Board

(option for e-VTR)

RCC-G Cables 9-pin/9-pin Cable

RMM-131 Rack Mount Kit

MLB-1M-100 Tele-File Memory Label

BCT-MX tapes BCT-MX Series MPEG IMX

Tapes

MSA-A "Memory Stick" IC Memory Media

Specifications

General

Power requirements:
AC 100 to 240 V, 50/60 Hz

Power consumption:
2A (200 W) / AC 240 V

Operating temperature:
+5 to +40 °C (+41 to +104 ° F)

Storage temperature:
-20 to +60 °C (-4 to +140 ° F)

Humidity:
20 to 90% (relative humidity)

Mass:
23.0 kg (50 lb 11 oz)

Dimensions:
427 (W) x 174 (H) x 544 (D) mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Take speed

MPEG IMX:
64.467 (525)/53.776 (625) mm/s

Betacam SX:
59.515 (525)/59.575 (625) mm/s

Betacam/Betacam SP:
118.6 (525)/101.51 (625) mm/s

Recording/playback time:
Max. 184 (525)/220 (625) min with
BCT-184MXL cassette

Fast forward/rewind time:
Approx. 3.5 min with BCT-184MXL cassette

Search speed range

MPEG IMX:
±78 times normal playback speed

Betacam SX:
±78 times normal playback speed

Betacam/Betacam SP:
±35 (525)/±42 (625) times normal
playback speed

Servo lock time:
0.5 (525)/0.7 (625) s or less (from standby
on)

Load/unload time:
6 s or less

Input/output signals

Analogue composite input:
BNC (2, including one loop through
output), 1.0 Vp-p, 75 Ω, sync negative

Analogue composite output:
BNC (3, including one character out),
1.0 Vp-p, 75 Ω, sync negative

Analogue component input:
BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

Analogue component output:
BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

SDI input:
BNC (2, including one active through out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:
BNC (3, including one character out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDTI-CP input:
BNC (1), SMPTE 326M (SDTI-CP)

SDTI-CP output:
BNC (2), SMPTE 326M (SDTI-CP)

HD-SDI output (requires optional BKMW-104
board):
BNC (3)

Analogue audio input:
XLR (4) (4CH: channel selectable)

Analogue audio output:
XLR (4) (4CH: channel selectable)

Digital audio input (CH 1/2, 3/4, 5/6, 7/8),
AES/EBU:
BNC (4), default 48 kHz (32 to 48 kHz with
sample rate converter), complies with
AES-3id-1995

Digital audio output (CH 1/2, 3/4, 5/6, 7/8),
AES/EBU:
BNC (4), 48 kHz fixed, Complies with
AES-3id-1995

Remote control

Remote (RS-422A):
D-sub 9-pin (2), Sony 9-pin remote
interface

RS-232C (ISR)*:
D-sub 9-pin (1), RS-232C interface

Parallel remote:
D-sub 50-pin (1)

Video control (1):
D-sub 15-pin (1)

Control panel:
Circular connector 10-pin

Time code input:
XLR (1)

Time code output:
XLR (1)

Ethernet I/F (requires optional BKMW-E3000
board):
RJ-45 (1),
100Base-T/100Base-TX/10Base-T

Memory card insertion slot:
Memory Stick (1), PCMCIA (1)

Monitor output L/R:
XLR (2) (channel selectable)

Phones:
JM-60 Stereo phone jack

Processor adjustment range

Video level:
±3 dB/-∞ to 3 dB selectable

Chroma level:
±3 dB/-∞ to 3 dB selectable

Set up/black level:
±30 IRE/±210 mV

Chroma phase/hue:
±30°

System sync phase:
±15 µs

System SC phase:
±200 ns

Y/C delay:
±100 ns (Betacam/Betacam SP playback
only)

Composite input level:
±3 dB

Digital video performance

Sampling frequency:
Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:
MPEG IMX/Betacam SX: 8 bits/sample

Error correction:
Reed-Solomon code

Digital input to analogue component output:
D/A quantization: 10 bits/sample
Bandwidth: 0 to 5.75 MHz ±0.5 dB
S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less

Analogue component input to analogue
component output (MPEG IMX
record/playback):
A/D and D/A quantization: 10 bits/sample
Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,
R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB
S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less LF non-linearity: 3.0% or
less

Analogue composite input to analogue
composite output (MPEG IMX
record/playback):
A/D and D/A quantization: 10 bits/sample
Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB
S/N ratio: 53 dB or more Differential gain:
2% or less Differential phase: 2° or less
Y/C delay: 20 ns or less K-factor (2T
pulse): 1% or less

Digital audio performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
MPEG IMX: 16 or 24 bits/sample
(selectable)
Betacam SX: 16 bits/sample

Analogue input to analogue output (MPEG
IMX record/playback):
A/D and D/A quantization: 24 bits/sample
Frequency response (0 dB at 1kHz): 20 Hz
to 20 kHz +0.5/-1.0 dB
Dynamic range (at 1 kHz, emphasis ON):
More than 90 dB (16 bits mode), More than
95 dB (24bits mode)
Distortion (at 1 kHz, emphasis ON,
reference level): Less than 0.05%
Cross talk (at 1 kHz, between any two
channels): Less than -80 dB
Wow and flutter: Below measurable level

Head room:
20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):
T1=50 µs, T2=15 µs

*ISR: Interactive Status Reporting

MSW-2000 MPEG IMX Recorder

Features

- Superb picture quality and high sound quality of MPEG IMX format
- 8-bit 4:2:2 component digital recording
- MPEG-2 4:2:2P@ML compression at 50 Mb/s
- SDTI-CP (Serial Data Transport Interface-Content Packages) output allows interface with other SDTI-CP equipped devices such as servers, non-linear editors
- Data transfer at up to twice normal speed (option: *1)
- Legacy playback of MPEG IMX and Betacam SX formats
- IP-network interface to allow audio and video materials to be sent and received across a standard network (option: *2)
- HD upconversion output capability (1080/59.94i, 1080/50i and 720/59.94p)(option: *3)
- Frame-accurate insert/assemble editing
- Pre-read editing capability
- Eight channels of 16-bit digital audio or four channels of 24-bit digital audio
- 525/625 switchable operation
- Variable speed control
- High speed colour picture search
- Dynamic Motion Control (DMC)
- Long recording and playback time of up to 184 minutes on L-cassette, 60 minutes on S-cassette
- Compact 4U-height design
- Versatile interfaces; analogue composite I/O, analogue component I/O, SDI I/O, SDTI-CP I/O, analog audio (4-ch), AES/EBU digital audio (16 bit-8ch/24 bit-4ch), and audio monitor (2-ch)
- UMID handling
- Shot mark handling
- Built-in Tele-File reader/writer module to read and write information onto and from a cassette with an optional Tele-File label attached
- Optional remote control panel BKMW-101

(*1) requires a DPR-208 board (service part) (*2) requires optional BKMW-E3000 Network Interface Board (*3) requires optional BKMW-104 HD Upconverter Board.

Supplied Accessories

PSW 4x16 rack mount screws (4)
 Operation manual (1)
 Installation manual (1)

Optional Accessories

BKMW-101 Remote Control Panel
 BKMW-102 Remote Control Unit
 BKMW-103 Control Panel Extension Kit
 BKMW-104 HD Up-converter Board
 BKMW-E3000 Network Interface Board
 (option for e-VTR)
 RCC-G Cables 9-pin/9-pin Cable
 RMM-131 Rack Mount Kit
 MLB-1M-100 Tele-File Memory Label
 BCT-MX tapes BCT-MX Series MPEG IMX
 Tapes



Specifications

General

Power requirements:

AC 100 to 240 V, 50/60 Hz

Power consumption:

2A (200 W) / AC 240 V

Operating temperature:

+5 to +40 °C (+41 to +104 ° F)

Storage temperature:

-20 to +60 °C (-4 to +140 ° F)

Humidity:

20 to 90% (relative humidity)

Mass:

23.0 kg (50 lb 11 oz)

Dimensions:

427 (W) x 174 (H) x 544 (D) mm

(16 7 / 8 x 6 7 / 8 x 21 1 / 2 inches)

Tape speed

MPEG IMX:

64.467 (525)/53.776 (625) mm/s

Betacam SX:

59.515 (525)/59.575 (625) mm/s

Recording/playback time:

Max. 184 (525)/220 (625) min with

BCT-184MXL cassette

Fast forward/rewind time:

Approx. 3.5 min with BCT-184MXL cassette

Search speed range

MPEG IMX:

±78 times normal playback speed

Betacam SX:

±78 times normal playback speed

Servo lock time:

0.5 (525)/0.7 (625) s or less (from standby on)

Load/unload time:

6 s or less

Input/output signals

Analogue composite input:

BNC (2, including one loop through output), 1.0 Vp-p, 75 Ω, sync negative

Analogue composite output:

BNC (3, including one character out), 1.0 Vp-p, 75 Ω, sync negative

Analogue component input:

BNC (x 3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

Analogue component output:

BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p, 75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p, 75 Ω

SDI input:

BNC (2, including one active through out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDI output:

BNC (3, including one character out), SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDTI-CP input:

BNC (1), SMPTE 326M (SDTI-CP)

SDTI-CP output:

BNC (2), SMPTE 326M (SDTI-CP)

HD-SDI output (requires optional BKMW-104 board):

BNC (x3)

Analogue audio input:

XLR (4) (4CH: channel selectable)

Analogue audio output:

XLR (4) (4CH: channel selectable)

Digital audio input (CH 1/2, 3/4, 5/6, 7/8),

AES/EBU:

BNC (4), default 48 kHz (32 to 48 kHz with sample rate converter), complies with AES-3id-1995

Digital audio output (CH 1/2, 3/4, 5/6, 7/8), AES/EBU:

BNC (4), 48 kHz fixed, Complies with AES-3id-1995

Remote control

Remote (RS-422A):

D-sub 9-pin (2), Sony 9-pin remote interface

RS-232C (ISR*):

D-sub 9-pin (1), RS-232C interface

Parallel remote:

D-sub 50-pin (1)

Video control (1):

D-sub 15-pin (1)

Control panel:

Circular connector 10-pin

Time code input:

XLR (1)

Time code output:

XLR (1)

Ethernet I/F (requires optional BKMW-E3000 board):

RJ-45 (1),

1000Base-T/100Base-TX/10Base-T

Memory card insertion slot:

Memory Stick (1), PCMCIA (1)

Monitor output L/R:

XLR (2) (channel selectable)

Phones:

JM-60 Stereo phone jack

Processor adjustment range

Video level:

±3 dB/-∞ to 3 dB selectable

Chroma level:

±3 dB/-∞ to 3 dB selectable

Set up/black level:

±30 IRE/±210 mV

Chroma phase/hue:

±30°

System sync phase:

±15 μs

System SC phase:

±200 ns

Composite input level:

±3 dB

Digital video performance

Sampling frequency:

Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:

MPEG IMX/Betacam SX: 8 bits/sample

Error correction:

Reed-Solomon code

Digital input to analogue component output:

D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz ±0.5 dB

S/N ratio: 56 dB or more K-factor (2T pulse): 1% or less

Analogue component input to analogue

component output (MPEG IMX

record/playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,

R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB

S/N ratio: 56 dB or more K-factor (2T

pulse): 1% or less LF non-linearity:

3.0% or less

Analogue composite input to analogue

composite output (MPEG IMX record/

playback):

A/D and D/A quantization: 10 bits/sample

Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB

S/N ratio: 53 dB or more Differential gain:

2% or less Differential phase: 2° or less

Y/C delay: 20 ns or less K-factor (2T

pulse): 1% or less

Digital audio performance

Sampling frequency:

48 kHz (synchronized with video)

Quantization:

MPEG IMX: 16 or 24 bits/sample

(selectable)

Betacam SX: 16 bits/sample

Analogue input to analogue output

(MPEG IMX record/playback):

A/D and D/A quantization: 24 bits/sample

Frequency response (0 dB at 1kHz): 20 Hz to 20 kHz +0.5/-1.0 dB

Dynamic range (at 1 kHz, emphasis ON):

More than 90 dB (16 bits mode), More than

95 dB (24bits mode)

Distortion (at 1 kHz, emphasis ON,

reference level): Less than 0.05%

Cross talk (at 1 kHz, between any two

channels): Less than -80 dB

Wow and flutter: Below measurable level

Head room:

20 dB (18 dB selectable)

Emphasis (ON/OFF selectable in REC mode):

T1=50 μs, T2=15 μs

*ISR: Interactive Status Reporting

MSW-M2100P/1 MPEG IMX Player

Features

- Superb picture quality and high sound quality of MPEG IMX format
- Legacy playback capability; MPEG IMX, Digital Betacam, Betacam SX, Betacam SP and Betacam formats
- SDTI-CP(*1) output to allow interface with SDTI-CP equipped devices such as servers, non-linear editors
- Data transfer at up to twice normal speed as standard
- IP-network interface to allow audio and video materials to be sent across a standard network (option: *2)
- HD upconversion output capability (1080/59.94i, 1080/50i and 720/59.94p)(option: *3)
- Versatile interfaces; analogue composite output, analog component output, SDI output, SDTI-CP output, analog audio (4-ch), AES/EBU digital audio (16 bit-8ch/24 bit-4ch), audio monitor (2-ch), RS-422A (Sony 9-pin), RS-232C, and parallel 50-pin
- Eight channels of 16-bit digital audio or four channels of 24-bit digital audio
- 525/625 switchable operation
- Variable speed control
- High speed picture search
- Dynamic Motion Control (DMC)
- Long playback time of up to 184 minutes on L-cassette, 60 minutes on S-cassette
- Compact 4U-height design
- Easy setup using "Memory Stick" media
- Shot Mark handling
- Built-in Tele-File reader/writer to read and write information onto and from a cassette with an optional Tele-File label attached
- Automatic scene change detect function
- Optional remote panel BKMW-101

(*1) Serial Data Transport Interface-Content Packages (*2) Requires optional BKMW-E3000 Network Interface Board (*3) Requires optional BKMW-104 HD Upconverter Board.



Supplied Accessories

PSW 4x16 rack mount screws (4)
 Operation manual (1)
 Installation manual (1)

Optional Accessories

BKMW-101 Remote Control Panel
 BKMW-102 Remote Control Unit
 BKMW-103 Control Panel Extension Kit
 BKMW-104 HD Up-converter Board
 BKMW-E3000 Network Interface Board
 (option for e-VTR)
 RCC-G Cables 9-pin/9-pin Cable
 RMM-131 Rack Mount Kit
 MLB-1M-100 Tele-File Memory Label
 BCT-MX tapes BCT-MX Series MPEG IMX
 Tapes
 MSA-A "Memory Stick" IC Memory Media

Specifications

General

Power requirements:
AC 100 to 240 V, 50/60 Hz

Power consumption:
2A (200 W) / AC 240 V

Operating temperature:
+5 to +40 °C (+41 to +104 ° F)

Storage temperature:
-20 to +60 °C (-4 to +140 ° F)

Humidity:
20 to 90% (relative humidity)

Mass:
23.0 kg (50 lb 11 oz)

Dimensions:
427 (W) x 174 (H) x 544 (D) mm
(16 7/8 x 6 7/8 x 21 1/2 inches)

Tape speed

MPEG IMX:
64.467 (525)/53.776 (625) mm/s

Digital Betacam:
96.7 mm/s

Betacam SX:
59.515 (525)/59.575 (625) mm/s

Betacam/Betacam SP:
118.6 (525)/101.51 (625) mm/s

Playback time:
Max. 184 (525)/220 (625) min with
BCT-184MXL cassette

Fast forward/rewind time:
Approx. 3.5 min with BCT-184MXL cassette

Search speed range

MPEG IMX:
±78 times normal playback speed

Digital Betacam:
±50 times normal playback speed

Betacam SX:
±78 times normal playback speed

Betacam/Betacam SP:
±35 (525)/±42 (625) times normal
playback speed

Servo lock time:
0.5 (525)/0.7 (625) s or less (from standby
on)

Load/unload time:
6 s or less

Output signals

Analogue composite output:
BNC (3, including one character out),
1.0 Vp-p, 75 Ω, sync negative

Analogue component output:
BNC (3, for 1 set, Y/R-Y/B-Y), Y: 1.0 Vp-p,
75 Ω, sync negative, R-Y/B-Y: 0.7 Vp-p,
75 Ω

SDI output:
BNC (3, including one character out),
SMPTE 259M (ITU-R BT.656-3), 270 Mb/s

SDTI-CP output:
BNC (2), SMPTE 326M (SDTI-CP)

HD-SDI output (requires optional BKMW-104
board):
BNC (3)

Analogue audio input:
XLR (4) (4CH: channel selectable)

Analogue audio output:
XLR (4) (4CH: channel selectable)

Cue audio output:
XLR (1, only Digital Betacam playback)

Digital audio output (CH 1/2, 3/4, 5/6, 7/8),
AES/EBU:
BNC (4), 48 kHz fixed, Complies with
AES-3id-1995

Remote control

Remote (RS-422A):
D-sub 9-pin (2), Sony 9-pin remote
interface

RS-232C (ISR*):
D-sub 9-pin (1), RS-232C interface

Parallel remote:
D-sub 50-pin (1)

Video control (1):
D-sub 15-pin (1)

Control panel:
Circular connector 10-pin

Time code input:
XLR (1)

Time code output:
XLR (1)

Ethernet I/F (requires optional BKMW-E3000
board):
RJ-45 (1),
1000Base-T/100Base-TX/10Base-T

Memory card insertion slot:
Memory Stick (1), PCMCIA (1)

Monitor output L/R:
XLR (2) (channel selectable)

Phones:
JM-60 Stereo phone jack

Processor adjustment range

Video level:
±3 dB/-∞ to 3 dB selectable

Chroma level:
±3 dB/-∞ to 3 dB selectable

Set up/black level:
±30 IRE/±210 mV

Chroma phase/hue:
±30°

System sync phase:
±15 μs

System SC phase:
±200 ns

Y/C delay:
±100 ns (Betacam/Betacam SP playback
only)

Digital video performance

Sampling frequency:
Y: 13.5 MHz, R-Y/B-Y: 6.75 MHz

Quantization:
MPEG IMX/BETACAM SX: 8 bits/sample,
Digital BETACAM: 10 bits/sample

Error correction:
Reed-Solomon code

Digital input to analogue component output:
D/A quantization: 10 bits/sample
Bandwidth: 0 to 5.75 MHz ±0.5 dB
S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less

Analogue component input to analogue
component output (MPEG IMX
record/playback):
A/D and D/A quantization: 10 bits/sample
Bandwidth: Y: 0 to 5.75 MHz +0.5/-2.0 dB,
R-Y/B-Y: 0 to 2.75 MHz +0.5/-2.0 dB
S/N ratio: 56 dB or more K-factor (2T
pulse): 1% or less LF non-linearity: 3.0% or
less

Analogue composite input to analogue
composite output (MPEG IMX
record/playback):
A/D and D/A quantization: 10 bits/sample
Bandwidth: 0 to 5.75 MHz +0.5/-2.0 dB
S/N ratio: 53 dB or more Differential gain:
2% or less Differential phase: 2° or less
Y/C delay: 20 ns or less K-factor (2T
pulse): 1% or less

Digital audio performance

Sampling frequency:
48 kHz (synchronized with video)

Quantization:
MPEG IMX: 16 or 24 bits/sample
(selectable)
Betacam SX: 16 bits/sample
Digital Betacam: 20 bits/sample

Analogue composite output (Digital Betacam
playback):
A/D and D/A quantization: 24 bits/sample
Frequency response (0 dB at 1kHz): 20 Hz
to 20 kHz +0.5/-1.0 dB
Dynamic range (at 1 kHz, emphasis ON):
More than 95 dB
Distortion (at 1 kHz, emphasis ON,
reference level): Less than 0.05%
Cross talk (at 1 kHz, between any two
channels): Less than -80 dB
Wow and flutter: Below measurable level

Head room:
20 dB (18 dB selectable)

*ISR: Interactive Status Reporting

SONY

Camcorder Accessories & Peripherals

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AC-DN2B	200
AC-SQ950B	201
AC-VQ1050B	201
BC-M150	202
BC-L70	203
BC-L500	204
BP-GL65	205
BP-GL95	206
BP-L60S	207
BP-L80S	207
CBK-MB01	208
CBK-FC01	208
CBK-SC01	208
CBK-SD01	208
CBK-NC01	209
CBK-PC01	209
HKDW-702/1	209
HKDW-703/1	209
HKDW-705	210
HKDW-902R	210
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VCL-0737W	217
VCL-HG0872	217
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VCT-PG11RMB	218
VCT-FXA	218
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AC-DN10 AC Adaptor/Charger

Features

- Compact and lightweight AC adaptor/charger
- Maximum 100 W DC power supply
- V-mount mechanism for direct attachment to compatible camcorders
- XLR-4-pin output to power other equipment
- Charging capability of Sony V-mount lithium-ion batteries (BP-GL95/GL65/L60S/L80S)
- Quick charging - A BP-GL95 can be fully charged within 145 minutes
- Can charge batteries while supplying AC power to other equipment

Applicable Models

DSR-250P DVCAM Camcorder
 DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DSR-450WSPL DVCAM Camcorder
 DVW-970P Digital Betacam Camcorder
 HDW-730S HDCAM Camcorder
 HDW-750P HDCAM Camcorder
 HDW-F900R HDCAM Camcorder
 MSW-970P MPEG IMX Camcorder
 PDW-510 XDCAM Camcorder
 PDW-510P XDCAM Camcorder
 PDW-530 XDCAM Camcorder
 PDW-530P XDCAM Camcorder
 WLL-CA50 Wireless Camera Transmitter
 WLL-CA55 Wireless Camera Transmitter
 PDW-F330 XDCAM HD Camcorder
 PDW-F350 XDCAM HD Camcorder

Supplied Accessories

Operation manual (1)
 AC power cord (1)

Specifications

Power requirements:
 AC 100 V to 240 V
 DC output:
 16.7 V, 6 A
 Operating temperature:
 0 to 40 °C (32 to 104 °F)
 Mass:
 800 g (1 lb 12 oz)
 Dimensions (W x H x D):
 101 x 160 x 37 mm
 (4 x 6 3/8 x 1 1/2 inches)



Charging time

BP-GL95:
 145 minutes
 BP-GL65:
 155 minutes
 BP-L60S
 155 minutes
 BP-L80S
 170 minutes

Eco-info:

Lead-free solder is used for soldering.
 Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

AC-DN2B AC Adaptor

Features

- Compact and lightweight AC adaptor/charger
- Maximum 150 W DC power supply
- V-mount mechanism for direct attachment to compatible camcorders
- XLR-4-pin output to power other equipment
- Up to 85% charging capability of Sony V-mount lithium-ion batteries (BP-GL95/GL65/L60S/L80S)

Applicable Models

DSR-250P/1 DVCAM Camcorder
 DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DSR-450WSPL DVCAM Camcorder
 DVW-970P Digital Betacam Camcorder
 HDW-730S HDCAM Camcorder
 HDW-750P HDCAM Camcorder
 HDW-F900R HDCAM Camcorder
 MSW-970P MPEG IMX Camcorder
 PDW-510 XDCAM Camcorder
 PDW-510P XDCAM Camcorder
 PDW-530 XDCAM Camcorder
 PDW-530P XDCAM Camcorder
 SRPC-1 HD Video Processor
 SRW-1 HDCAM-SR Portable VTR
 WLL-CA50 Wireless Camera Transmitter
 WLL-CA55 Wireless Camera Transmitter

Supplied Accessories

DC power cord (1)
 Operation manual (1)

Optional Accessories

CCDD-X2 4-pin/4-pin DC Power Cord for Portable Video Equipment

BKW-L601 Battery Adaptor

Specifications

Power requirements:
 AC 100 to 240 V
 Rated power output (DC):
 150 W
 Voltage output (DC):
 16.7 V
 Current output (DC):
 9 A (on regulation)



Mass:

950 g (2 lb 2 oz)

Dimensions:

101(W) x 169(H) x 70(D) mm
 (4 x 6 3/4 x 2 7/8 inches)

Charging time:

BP-GL95
 155 minutes (to about 85% capacity)
 BP-GL65
 100 minutes (to about 85% capacity)
 BP-L60S
 100 minutes (to about 85% capacity)

AC-SQ950B AC Adaptor/Charger

Applicable Models

DSR-PDX10P

HVR-A1E

Specifications

Dimensions:

W 123 x H 48 x D 135 mm (4 7/8 x 1 15/16
x 5 3/8 inches)

Mass:

390 g (13.8 oz)

AC power requirement:

AC 100 V to 240 V, 50 Hz/60 Hz

DC power requirement:

12/24 V

Power consumption:

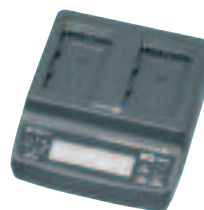
35 W

Operating Temperature:

0°C to 40°C (32°F to 104°F)

Storage Temperature:

-20°C to 60°C (-4°F to +140°F)



AC-VQ1050B AC Adaptor/Charger

Features

•Quick Charge •Intelligent Display •DC Charge

Applicable Models

DSR-PD170P

HVR-Z1E

HVR-M10E

Specifications

Dimensions:

W 123 x H 53 x D 135 mm
(4 7/8 x 2 1/8 x 5 3/8 inches)

Mass:

390 g (13.8 oz)

AC power requirement:

AC 100 V to 240 V

Frequency:

50 Hz/60 Hz

Power consumption:

35 W

Operating Temperature:

0°C to 40°C (32°F to 104°F)

Storage Temperature:

-20°C to 60°C (-4°F to +140°F)



BC-M150 Ni-MH & Li-ion Battery Charger

Features

- Battery charger for BP-L/IL/GL Series lithium-ion battery packs and BP-M100/M50 nickel metal hydride battery packs
- Up to four battery packs can be charged simultaneously
- LED indicators to indicate charging status, and discharge ('refresh') status of a nickel metal hydride battery
- LCD screen to indicate information of connected batteries such as battery reserve, charge time for full charge, charge/discharge cycles ^(*)
- DC power output to an external device via the XLR 4-pin connector

(*) The BC-M150 indicates the battery reserve only when charging the BP-IL75/GL65/GL95/M50/M100 batteries.

Supplied Accessories

AC power cord (1)

Plug holder (1)

Optional Accessories

CCDD-X2 4-pin/4-pin DC Power Cord for

Portable Video Equipment

BP-GL65 Rechargeable Lithium-ion Battery Pack

BP-GL95 Rechargeable Lithium-ion Battery Pack

BP-L60S Rechargeable Lithium-ion Battery Pack

BP-L80S Rechargeable Lithium-ion Battery Pack

Specifications

Power requirements:

AC 120 to 240 V, 50/60 Hz

Power consumption:

Approx. 160 W

Output:

DC 16.8 V, 6 A (to the lithium-ion battery pack or an external device via the XLR 4-pin)

DC 19.5 V, 5 A (to the nickel metal hydride battery pack)

Charging time:

For one battery

BP-GL95: 145 minutes

BP-GL65: 155 minutes

BP-L60S: 155 minutes

For four batteries

BP-GL95: 345 minutes

BP-GL65: 365 minutes

BP-L60S: 365 minutes

Operating temperature:

0 to +40°C (+32 to +104°F)

Storage temperature:

-20 to +60°C (-4 to +140°F)

Operating/storage humidity:

20% to 90% RH

Mass:

3.5 kg (7 lb 11 oz)

Dimensions:

155 (W) × 120 (H) × 330 (D) mm

(6 1/8 × 4 3/4 × 13 inches)



BC-L70 Li-ion Battery Charger

Features

- Can charge Sony V-mount type lithium-ion batteries: BP-GL95/GL65
- Up to two battery packs can be charged simultaneously
- Quick and efficient charging
- One BP-GL95 battery can be fully charged within 145 minutes
- Two BP-GL95 batteries can be fully charged within 220 minutes
- Max. 100 W DC power supply (XLR-4-pin)

Supplied Accessories

AC Power Card
Plug holder
Operation manual

Optional Accessories

BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-GL95 Rechargeable Lithium-ion Battery Pack
BP-L60S Rechargeable Lithium-ion Battery Pack
BP-L80S Rechargeable Lithium-ion Battery Pack

Applicable Models

LMD-9050 LCD monitor
LMD-9030 LCD monitor
LMD-9020 LCD monitor
SRPC-1 HD Video Processor
SRW-1 HDCAM-SR Portable VTR
WLL-CA50 Wireless Camera Transmitter
PDW-D1 XDCAM Drive Unit
PDW-V1 XDCAM Mobile Deck
HDW-S280 HDCAM Compact Recorder
HDW-750P HDCAM Camcorder
MSW-970P MPEG IMX Camcorder PAL model
HDW-730S HDCAM Camcorder
HDW-F900R HDCAM Camcorder
DVW-970P Digital Betacam Camcorder
MSW-970 MPEG IMX Camcorder
DSR-400PL DVCAM Camcorder
DSR-450WSPL DVCAM Camcorder
DSR-400PK DVCAM Camcorder
DSR-50P Recorder
DVW-970 Digital Betacam Camcorder
PDW-510P XDCAM Camcorder
PDW-530P XDCAM Camcorder
PDW-510 XDCAM Camcorder
PDW-530 XDCAM Camcorder
PDW-F330 XDCAM HD Camcorder
PDW-F350 XDCAM HD Camcorder

Specifications

Power requirements
AC 100 to 240 V, 50/60 Hz
Power consumption
Less than 168 VA
DC output
Max. 16.8 V, 6 A
Operating temperature
0 to 45 °C (32 to 113 °F)
Dimensions (W x H x D)
60 x 237 x 134 mm
(2 3/8 x 9 3/8 x 5 3/8 inches)
Mass
Approx. 1.2 kg (2 lb 10 oz)
Charging time
For one battery
BP-GL95: 145 minutes
BP-GL65: 155 minutes
BP-L60S: 150 minutes
For two batteries
BP-GL95: 220 minutes
BP-GL65: 170 minutes
BP-L60S: 170 minutes



BC-L500 Li-ion Battery Charger

Features

- The BC-L500 is a desktop-type four-channel quick charger for the BP-GL/IL/L Series lithium-ion batteries.
- Can charge Sony V-mount type lithium-ion battery: BP-GL95/GL65/L60S/IL75/L90A/L60A/L40A
- Up to four battery packs can be charged simultaneously
- Quick simultaneous charging
- One BP-GL95 battery can be fully charged approximately 145 minutes
- Four BP-GL95 batteries can also be fully charged approximately 145 minutes
- Space-saving design
- 3U high, 19-inch rack mountable
- Front slot mechanism
- Two chargers stackable

Supplied Accessories

AC power cord (1)

Plug holder (1)

Operation manual (1)

Optional Accessories

BP-GL65 Rechargeable Lithium-ion Battery Pack

BP-GL95 Rechargeable Lithium-ion Battery Pack

BP-L60S Rechargeable Lithium-ion Battery Pack

BP-L80S Rechargeable Lithium-ion Battery Pack

BP-IL75 Rechargeable Lithium-ion Battery Pack

BP-L40A Rechargeable Lithium-ion Battery Pack

BP-L60A Rechargeable Lithium-ion Battery Pack

BP-L90A Rechargeable Lithium-ion Battery Pack

Applicable Models

WLL-CA50 Wireless Camera Transmitter (CER)

WLL-CA50 Wireless Camera Transmitter (UC)

DSR-400PL DVCAM Camcorder

DSR-450WSL DVCAM Camcorder

DSR-450WSPL DVCAM Camcorder

DSR-400L DVCAM Camcorder

DSR-400PK DVCAM Camcorder

DSR-400K DVCAM Camcorder

SRPC-1 HD Video Processor

HDW-750P HDCAM Camcorder

HDW-730S HDCAM Camcorder

HDW-750 HDCAM Camcorder

HDW-S280 HDCAM Compact Recorder

PDW-R1 XDCAM Field Recorder

PDW-V1 XDCAM Mobile Deck

(Playback and File Recording)

PDW-D1 XDCAM Drive Unit

SRW-1 HDCAM-SR Portable VTR

MSW-970P MPEG IMX Camcorder

DWV-970P Digital Betacam Camcorder

PDW-F350L XDCAM HD Camcorder

(without lens)

MSW-970 MPEG IMX Camcorder

PDW-F330L XDCAM HD Camcorder

(without lens)

DWV-970 Digital Betacam Camcorder

PDW-F330K XDCAM HD Camcorder

(with lens)

HDW-F900R HDCAM Camcorder

PDW-530P XDCAM Camcorder

(MPEG IMX/DVCAM Recording)

PDW-510P XDCAM Camcorder

(DVCAM Recording)

PDW-510 XDCAM Camcorder

(DVCAM Recording)

PDW-530 XDCAM Camcorder

(MPEG IMX/DVCAM Recording)

PDW-F330 XDCAM HD Camcorder

PDW-F350 XDCAM HD Camcorder

Specifications

Power requirements

AC 100 to 240 V, 50/60 Hz

Power consumption

480VA

DC output

Max. 16.8 V, 6 A

Operating temperature

0 to 45 °C (32 to 113 °F)

Dimensions (W x H x D)

435 x 124 x 230 mm

(17 1/4 x 5 x 9 1/8 inches)

Mass

Approx. 5.6 kg (12 lb 5 oz)

Charging time

For one battery

BP-GL95: 145 minutes

BP-GL65: 155 minutes

BP-L60S: 150 minutes

For two batteries

BP-GL95: 145 minutes

BP-GL65: 155 minutes

BP-L60S: 150 minutes



BP-GL65 Rechargeable Lithium-ion Battery Pack

Features

- Intelligent “INFO” battery that communicates digitally with Sony camcorders
- Remaining capacity indication in viewfinder of the DVW-970/970P, HDW-750/750P, HDW-F900R, HDW-730/730S, MSW-970/970P, PDW-510/510P, PDW-530/530P camcorders
- V-mount attaching mechanism for quick and easy battery change
- Four-step green LED indicators for quick visual verification of the battery remaining capacity (more than 80%, 60%, 40%, 20%)
- Four-step orange LED indicators for quick visual check of battery remaining capacity (below 20%, 15%, 10%, 5%)

When the BP-GL65 is used with camcorders other than those listed above, the battery alarm may not function properly.



Applicable Models

BC-L70 Li-ion Battery Charger
BC-L500 Li-ion Battery Charger
BC-M150 Ni-MH & Li-ion Battery Charger
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DSR-450WSPL DVCAM Camcorder
DVW-970P Digital Betacam Camcorder
HDW-730S HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900R HDCAM Camcorder
MSW-970P MPEG IMX Camcorder
PDW-510 XDCAM Camcorder
PDW-510P XDCAM Camcorder
PDW-530 XDCAM Camcorder
PDW-530P XDCAM Camcorder

PDW-F3
30
XDCAM
HD
Camcord
er

PDW-F350 XDCAM HD Camcorder
SRPC-1 HD Video Processor
SRW-1 HDCAM-SR Portable VTR
WLL-CA50 Wireless Camera Transmitter
WLL-CA55 Wireless Camera Transmitter

Supplied Accessories

Operation manual (1)

Specifications

Type of battery:
Rechargeable lithium-ion battery

Maximum voltage:
16.8 V

Nominal voltage:
14.4 V

Cell capacity:
65 Wh

Operating temperature (for discharge):
-10°C to +45°C (+14°F to +113°F)

Dimensions (W x H x D):
92 x 138 x 41 mm (3 5/8 x 5 1/2 x 1 5/8 inches)

Mass:
Approx. 550 g (1 lb 3 oz)

Eco-info:
Lead-free solder is used for soldering.
Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

BP-GL95 Rechargeable Lithium-ion Battery Pack

Features

- Intelligent “INFO” battery that communicates digitally with Sony camcorders
- Remaining capacity indication on viewfinder of the DVW-970/970P, HDW-750/750P, HDW-F900R HDW-730/730S, MSW-970/970P, PDW-510/510P, PDW-530/530P camcorders
- V-mount attaching mechanism for quick and easy battery change
- Four-step green LED indicators for quick visual verification of the battery remaining capacity (more than 80%, 60%, 40%, 20%)
- Four-step orange LED indicators for quick visual check of battery remaining capacity (below 20%, 15%, 10%, 5%)

When the BP-GL95 is used with camcorders other than those listed above, the battery alarm may not function properly.



Applicable Models

BC-L70 Li-ion Battery Charger
 BC-L500 Li-ion Battery Charger
 BC-M150 Ni-MH & Li-ion Battery Charger
 DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DSR-450WSPL DVCAM Camcorder
 HDW-730S HDCAM Camcorder
 HDW-750P HDCAM Camcorder
 HDW-F900R HDCAM Camcorder
 DVW-970P Digital Betacam Camcorder
 MSW-970P MPEG IMX Camcorder
 PDW-510 XDCAM Camcorder
 PDW-510P XDCAM Camcorder
 PDW-530 XDCAM Camcorder
 PDW-530P XDCAM Camcorder
 PDW-F330 XDCAM HD Camcorder
 PDW-F350 XDCAM HD Camcorder
 PDW-V1 XDCAM Mobile Deck
 SRPC-1 HD Video Processor
 SRW-1 HDCAM-SR Portable VTR
 WLL-CA50 Wireless Camera Transmitter
 WLL-CA55 Wireless Camera Transmitter

Supplied Accessories

Operation manual (1)

Specifications

Type of battery:

Rechargeable lithium-ion battery

Maximum voltage:

16.8 V

Nominal voltage:

14.4 V

Cell capacity:

95 Wh

Operating temperature (for discharge):

-20°C to +45°C (-4°F to +113°F)

Dimensions (W x H x D):

92 x 138 x 41 mm (3 5/8 x 5 1/2 x 1 5/8 inches)

Mass:

760 g (1 lb 10 oz)

Eco-info

Lead-free solder is used for soldering.

Halogenated flame retardants are not used in the cabinets and the printed wiring boards.

BP-L60S Rechargeable Lithium-ion Battery Pack

Features

- High capacity lithium-ion battery
- Built-in LED capacity indicator for quick visual check of the battery reserve
- V-shoe attachment for quick and easy battery change
- Specially designed for compatibility with non info-lithium enabled products, so that the battery level and alarms will function correctly.

Applicable Models

BC-L70 Ni-MH & Li-ion Battery Charger
 BC-L500 Li-ion Battery Charger
 BC-M150 Ni-MH & Li-ion Battery Charger
 DSR-250P DVCAM Camcorder
 DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DSR-450WSPL DVCAM Camcorder
 DSR-50P Recorder
 DVW-970P Digital Betacam Camcorder
 DXC-D50PH 3-chip CCD Portable Colour Camera
 DXC-D50PK 3-chip CCD Portable Colour Camera
 DXC-D50PL 3-chip CCD Portable Colour Camera
 DXC-D50WSPL 3-chip CCD Portable Colour Camera
 HDW-730S HDCAM Camcorder
 HDW-750P HDCAM Camcorder
 HDW-F900R HDCAM Camcorder
 MSW-970P MPEG IMX Camcorder
 PDW-510 XDCAM Camcorder
 PDW-510P XDCAM Camcorder
 PDW-530 XDCAM Camcorder
 PDW-530P XDCAM Camcorder

PDW-F330 XDCAM HD Camcorder
 PDW-F350 XDCAM HD Camcorder
 WLL-CA50 Wireless Camera Transmitter
 WLL-CA55 Wireless Camera Transmitter

Specifications

Battery type
 Lithium-ion rechargeable battery
 Maximum voltage
 DC 16.8 V
 Nominal voltage
 DC 14.4 V
 Capacity
 64.8 Wh
 Operating temperature
 -20 to +45 °C (-4 to +113 °F)
 Dimensions (W x H x D)
 101 x 37.3 x 168.7 mm
 (4 x 1 5/16 x 6 1/2 inches)
 Mass
 Approx. 800 g (1 lb 10 oz)



BP-L80S Rechargeable Lithium-ion Battery Pack

Features

- High capacity lithium-ion battery
- Built-in LED capacity indicator for quick visual check of the battery reserve
- V-shoe attachment for quick and easy battery change
- Specially designed for compatibility with non info-lithium enabled products, so that the battery level and alarms will function correctly.

Applicable Models

BC-L70 Ni-MH & Li-ion Battery Charger
 BC-L500 Li-ion Battery Charger
 BC-M150 Ni-MH & Li-ion Battery Charger
 DSR-250P DVCAM Camcorder
 DSR-400PK DVCAM Camcorder
 DSR-400PL DVCAM Camcorder
 DSR-450WSPL DVCAM Camcorder
 DVW-970P Digital Betacam Camcorder
 DXC-D50PH 3-chip CCD Portable Colour Camera
 DXC-D50PK 3-chip CCD Portable Colour Camera
 DXC-D50PL 3-chip CCD Portable Colour Camera
 DXC-D50WSPL 3-chip CCD Portable Colour Camera
 HDW-730S HDCAM Camcorder
 HDW-750P HDCAM Camcorder
 HDW-F900R HDCAM Camcorder
 MSW-970P MPEG IMX Camcorder
 WLL-CA50 Wireless Camera Transmitter
 WLL-CA55 Wireless Camera Transmitter

Specifications

Battery type
 Lithium-ion rechargeable battery
 Maximum voltage
 DC 16.8 V
 Nominal voltage
 DC 14.4 V
 Capacity
 83.5Wh
 Operating temperature
 -20 to +45 °C (-4 to +113 °F)
 Dimensions (W x H x D)
 101 x 52 x 169 mm
 (4 x 2 1/16 x 6 5/8 inches)
 Mass
 Approx 1000g (2lb 3 oz)



CBK-MB01 Picture Cache Board

Features

- Up to eight seconds of video signal can be recorded before the REC button is pressed
- Allows recordings to be made over long time periods

Applicable Models

DVW-970P Digital Betacam Camcorder



CBK-FC01 Pull-down (24P shooting) Board

Features

- Provides progressive modes of 23.976P to offer a film-like effect
- Recording to disc is in 59.94i via 2-3 pull-down.

Applicable Models

PDW-510 XDCAM Camcorder (DVCAM Recording)

PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)



CBK-SC01 Analogue Composite Input Board

Applicable Models

PDW-510 XDCAM Camcorder (DVCAM Recording)

PDW-510P XDCAM Camcorder (DVCAM Recording)

PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)

PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)



CBK-SD01 SDI Output Board

Applicable Models

PDW-510 XDCAM Camcorder (DVCAM Recording)

PDW-510P XDCAM Camcorder (DVCAM Recording)

PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)

PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)



CBK-NC01 Ethernet (100Base-TX) Adaptor

Features

- Allows PDW-530/530P/510/510P camcorders to connect with an Ethernet network

Applicable Models

PDW-510 XDCAM Camcorder (DVCAM Recording)
PDW-510P XDCAM Camcorder (DVCAM Recording)
PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)



CBK-PC01 Memory Card Adaptor

Features

- Memory card adaptor *1 that enables Proxy Data generated by the PDW-510/510P/530/530P to be recorded onto a memory card *2

*1 A memory card and its compatible memory card adaptor are required.
*2 Compatible Sony products are as follows. For other compatible products offered by SanDisk Corporation, please consult with your nearest Sony office. Memory Stick: Sony Memory Stick Pro MSX-1GS, MSX-512S Memory Stick adaptor: Sony Memory Stick PC Card Adaptor MSAC-PC4

Applicable Models

PDW-510 XDCAM Camcorder (DVCAM Recording)
PDW-510P XDCAM Camcorder (DVCAM Recording)
PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)



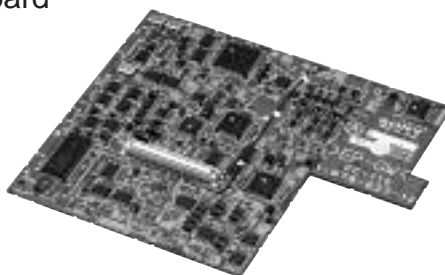
HKDW-702/1 Down Converter Board

Features

- Used with the HDW-730S/750P/F900R series
- Provides down-converted Standard Definition output
- The output is available in SD-SDI or analogue composite

Applicable Models

HDW-730S HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900R HDCAM Camcorder



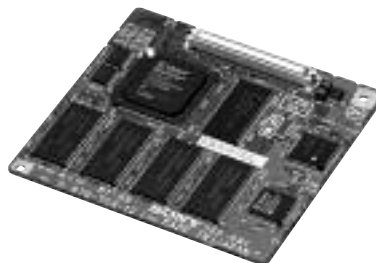
HKDW-703/1 Picture Cache Board

Features

- Used with the HDW-730S/750P/F900R series
- Provides up to seven seconds of loop recording using solid state memory so that scenes happening prior to the press of REC start button are captured

Applicable Models

HDW-730S HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900R HDCAM Camcorder



HKDW-705 Slow Shutter Board

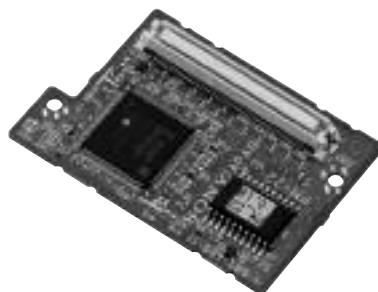
Features

- Used with the HDW-750P/730S camcorder
- Allows to slow the shutter speed down to 64-frame period (1-, 2-, 3-, 4-, 5-, 6-, 7-, 8-, 16-, 32-, or 64-frame period)
- Helps to make images in extremely dark environment
- Helps to make create pictures by the intentional use of blurred images

Applicable Models

HDW-730S HDCAM Camcorder

HDW-750P HDCAM Camcorder



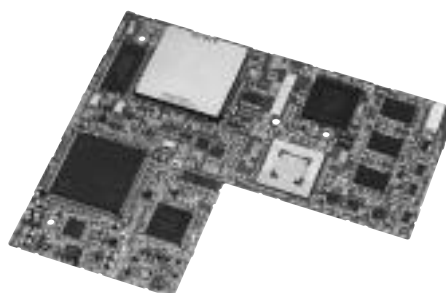
HKDW-902R 2-3 Pull-down/Down Converter Board

Features

- Used with the HDW-750P/730S/F900R camcorder
- Down-converts 1080/23.98P HD signals to SD signals via 2-3 pull-down circuitry
- SD monitoring of 1080/23.98P signals on a conventional NTSC monitor
- Also enables SD output to the HDW-F900R's viewfinder or a monitor connected to the camcorder during 23.98P recording
- Users can check images on the viewfinder or monitor without the flicker that usually occurs from 23.98P recording
- SD signal, SD-SDI or analogue composite can be selected via the camcorder's set-up menu.

Applicable Models

HDW-F900R HDCAM Camcorder



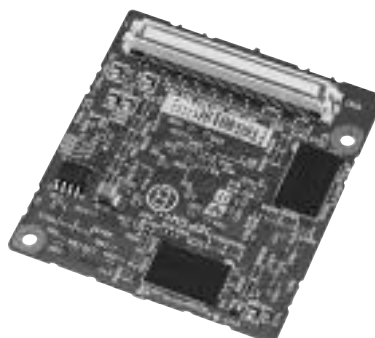
HKDW-905R Slow Shutter/Image Inverter Board

Features

- Used with the HDW-750P/730S/F900R camcorder
- Allows to slow the shutter speed down to 64-frame period (1-, 2-, 3-, 4-, 5-, 6-, 7-, 8-, 16-, 32-, or 64-frame period)
- Helps to make images in extremely dark environment
- Helps to make create pictures by the intentional use of blurred images

Applicable Models

HDW-F900R HDCAM Camcorder



HVL-20DW2 Battery Video Light

Battery Video Light

Applicable Models

DSR-PD170P DVCAM Camcorder

HVR-Z1E HDV Camcorder



HVL-F10 Video Flash

Video Flash

Applicable Models

DSR-PDX10P DVCAM Camcorder

HVL-FH1100 Flash

The HVL-FH1100 camcorder flash docks on the camcorder's Intelligent Accessory Shoe, and the interface is designed so that when the camcorder's photo button is pressed, the light flashes in synchronization.

Applicable Models DSR-PDX10P DVCAM Camcorder	Specifications Dimensions: W 68 x H 110 x D 92 mm (2 3/4 x 4 3/8 x 3 5/8 inches) Mass: 190 g (6.7 oz) Battery Power Requirements: AA Alkaline (4)	Connector: Intelligent Accessory Shoe
Supplied Accessories Operation manual (1) Pouch (1)		

LC-777 Carrying Case

Applicable Models
PDW-530P XDCAM Camcorder
PDW-510P XDCAM Camcorder
PDW-530 XDCAM Camcorder
PDW-510 XDCAM Camcorder

LC-DN7 Carrying Case

Applicable Models
DWW-970P Digital Betacam Camcorder
MSW-970P MPEG IMX Camcorder
HDW-730S HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900R HDCAM Camcorder

LCH-FXA Hard Carrying Case

Features
•With its specially designed interior, this case can efficiently store the video camera and accessories.

Applicable Models
HVR-Z1E



LCH-TRV950 Hard Carrying Case

Features
•With its specially designed interior, this case can efficiently store the video camera and accessories.

Applicable Models DSR-PDX10P DVCAM Camcorder	Specifications Dimensions: W 395 x H 260 x D 205 mm (15 5/8 x 10 1/4 x 8 1/8 inches) Mass: 2700 g (5 lb 15 oz)
Supplied Accessories Key (2) Shoulder strap (1) Sticker (1)	

LCH-VX2000A Hard Carrying Case

Hard Carrying Case

Applicable Models
DSR-PD170P DVCAM Camcorder

LCR-FXA Rain Jacket

Applicable Models
HVR-Z1E



LCS-VCB Soft Carrying Case

Applicable Models
HVR-Z1E



LO-32BMT 2/3-inch Lens Mount Adaptor

Features

- For mounting a 2/3-inch bayonet-mount type lens on 1/2-inch type CCD cameras such as the PDW-F330/F350

Applicable Models
PDW-F330K XDCAM HD Camcorder
(with lens)

PDW-F330L XDCAM HD Camcorder
(without lens)

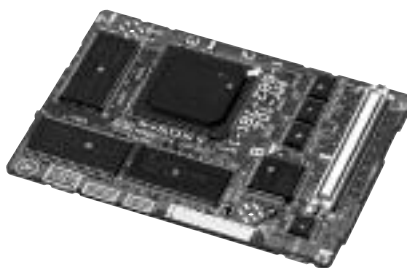
PDW-F350L XDCAM HD Camcorder
(without lens)



MSDW-903 Picture Cache Board

Picture cache board for MSW-970/970P MPEG IMX Camcorder

Applicable Models
MSW-970 MPEG IMX Camcorder
MSW-970P MPEG IMX Camcorder



MSDW-904 Analog Composite Input Board

Analogue composite input board for MSW-970/970P MPEG IMX Camcorder

Applicable Models
MSW-970 MPEG IMX Camcorder
MSW-970P MPEG IMX Camcorder



NP-F570 Rechargeable Battery Pack

Applicable Models

DSR-PD170P
HVR-Z1E
HVR-M10E



NP-F770 Rechargeable Battery Pack

Applicable Models

DSR-PD170P
HVR-Z1E
HVR-M10E



2NP-F970/B Rechargeable Battery Pack (2)

The 2NP-F970 is a rechargeable battery pack. Each pack includes two NP-970 batteries suitable for use with the DSR-PD170P, HVR-Z1E and HVR-M10E products.

Features

- STAMINA super-long battery life and lithium-ion cells with no 'Memory Effect'
- Both highly efficient, compact and light-weight
- Built-in microprocessor which communicates with the camera and accurately indicate remaining battery time in minutes

Applicable Models

DSR-PD170P
HVR-Z1E
HVR-M10E

Supplied Accessories

NP-970 (2)



2NP-QM91D/B Rechargeable Battery Pack (2)

Features

- Indicate the remaining capacity of the battery via 5 types of 4 LEDs indication
- Indicate the charging via LEDs light

Applicable Models

DSR-PDX10P
HVR-A1E

Supplied Accessories

Operation manual (*) (1)

(*) English/French

Specifications

Dimensions:

W 38.2 x H 59.5 x D 55.6 mm
(1 9/16 x 2 3/8 x 2 1/4 inches)

Mass:

225 g (7.9 oz)

Maximum output voltage:

DC 8.4 V

Capacity:

29.8 Wh (4140 mAh)

Operating Temperature:

0 to +40°C (+32°F to +104°F)



NP-QM91D Rechargeable Battery Pack

Features

- Indicate the remaining capacity of the battery via 5 types of LEDs indication
- Indicate the charging via LEDs light

Applicable Models

DSR-PDX10 DVCAM Camcorder
HVR-A1E

Supplied Accessories

Operation manual (1)

Specifications

Dimensions:

W 38.2 x H 59.5 x D 55.6 mm (1 9/16
x 2 3/8 x 2 1/4 inches)

Mass:

225 g (7.9 oz)

Maximum output voltage:

DC 8.4 V

Capacity:

29.8 Wh (4140 mAh)

Operating Temperature:

0 to +40°C (+32°F to +104°F)



RM-1BP LANC Remote Controller

Applicable Models

HVR-A1E HDV Camcorder



RM-B150 Remote Control Unit

Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera
DSR-450WSPL DVCAM Camcorder
DVW-970P Digital Betacam Camcorder
HDC-1500 HD Portable Camera
HDC-1550 HD Portable Camera
HDC-X300 HD Multi-purpose Camera
HDC-X300K HD Multi-purpose Camera
HDC-X310 HD Multi-purpose Camera
HDC-X310K HD Multi-purpose Camera
HDW-730S HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900R HDCAM Camcorder
MSW-970P MPEG IMX Camcorder
PDW-510 XDCAM Camcorder
PDW-510P XDCAM Camcorder
PDW-530 XDCAM Camcorder
PDW-530P XDCAM Camcorder
SRPC-1 HD Video Processor
SRW-1 HDCAM-SR Portable VTR
WLL-RX55 Wireless Camera Receiver



RM-B750 Remote Control Unit

Features

- Designed to establish a highly mobile and fully controllable camera system in the field

Applicable Models

BVP-E30P 3-chip CCD Portable Colour Camera

BVP-E30WSP 3-chip CCD Portable Colour Camera

DSR-450WSPL DVCAM Camcorder

DWW-970P Digital Betacam Camcorders

HDC-1000 3-chip CCD Studio/OB Camera

System

HDC-1500 3-chip CCD Studio/OB Camera System

HDCU-1500 HD Camera Control Unit

HDC-1550 HD Portable Camera

HDC-X300 HD Multi-purpose Camera

HDC-X300K HD Multi-purpose Camera

HDC-X310 HD Multi-purpose Camera

HDC-X310K HD Multi-purpose Camera

HDW-730S HDCAM Camcorder

HDW-750P HDCAM Camcorder

HDW-F900R HDCAM Camcorder

MSW-970P MPEG IMX Camcorder

PDW-510 XDCAM Camcorder

PDW-510P XDCAM Camcorder

PDW-530 XDCAM Camcorder

PDW-530P XDCAM Camcorder

SRPC-1 HD Video Processor

SRW-1 HDCAM-SR Portable VTR

WLL-RX55 Wireless Camera Receiver

Specifications

General

Power requirements:

DC 10.5 - 30 V (max) (supplied from camera/camcorder/CCU)

Operating temperature:

+5°C to +40 °C

Dimensions:

-20°C to +55°C

Mass:

Approx. 0.7 kg (1 lb 9 oz)

Inputs

Control interface:

8-pin (x 1), Sony Camera Command Network Protocol

Monitor in:

BNC type (x 1) VBS (No HD signal capable)



VCL-0737W Wide Conversion Lens

Features

•0.7 times wide conversion lens •Extensive Improvement of resolution.

Applicable Models

BRC-300 3-CCD Colour Video Camera
DSR-PDX10P DVCAM Camcorder

Supplied Accessories

Carrying case (1)
Lens Caps (for the front and back of the lens) (2)
Operation manual (1)

Specifications

Dimension (Approx.) :
Diameter 67 mm (2 3/4 inches)
Length (Approx.):
47mm (1 7/8 inches)
Mass:
196 g (7 lb)

VCL-HG0872 HDV Wide Conversion Lens

Applicable Models

HVR-Z1E HDV Camcorder



VCT-14 Tripod Adaptor



Applicable Models

HDC-1500 HD Portable Camera
BVP-E30P 3-chip CCD Portable Colour Camera
BVP-E30WSP 3-chip CCD Portable Colour Camera
DVW-970P Digital Betacam Camcorder
HDW-730S HDCAM Camcorder
HDW-750P HDCAM Camcorder
HDW-F900R HDCAM Camcorder
MSW-970P MPEG IMX Camcorder
PDW-510 XDCAM Camcorder (DVCAM Recording)
PDW-510P XDCAM Camcorder (DVCAM Recording)
PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Specifications

Dimensions:
282(W) x 27(H) x 80(D)mm
(11 1/8 x 1 1/8 x 3 1/4 inches)
Mass:
900 g (2 lb)

VCT-PG11RMB Tripod with the RM-1BP LANC Remote Controller

Applicable Models
HVR-A1E HDV Camcorder



VCT-FXA Shoulder Brace

Applicable Models
HVR-Z1E HDV Camcorder



VF-72CPK PL Filter Kit

Applicable Models
HVR-Z1E HDV Camcorder



VTR/Deck Accessories & Peripherals

BKDW-101	220
BKMW-101	220
BKMW-102	220
BKMW-103	221
BKMW-104	221
BKMW-E3000	222
BKP-L551	223
DSBK-1501	223
DSBK-1505	223
DSBK-1601	223
DSBK-1801	224
DSBK-1820	224
DSBK-2020	224
DSRM-10	224
HKDW-101	225
HKDW-102	225
HKDW-104	225
HKDW-105	225
PDBK-101	226
PDBK-102	226
PDBK-103	226
PDBK-104	226
RM-280	227
RMM-131	227

BKDW-101 Remote Control Panel

Remote control panel for DVW-2000 Series Digital Betacam recorders

Applicable Models

DVW-2000 Digital Betacam Recorder
DVW-2000P Digital Betacam Recorder
DVW-M2000 Digital Betacam Recorder
DVW-M2000P Digital Betacam Recorder



BKMW-101 Remote Control Panel

Remote control panel for MSW-2000/1 series MPEG IMX VTRs

Applicable Models

MSW-2000 MPEG IMX Recorder
MSW-A2000 MPEG IMX Recorder
MSW-A2000P MPEG IMX Recorder
MSW-M2000 MPEG IMX Recorder
MSW-M2000P MPEG IMX Recorder
MSW-M2100 MPEG IMX Player
MSW-M2100P MPEG IMX Player

(all versions including /1)

Optional Accessories

BKMW-102 Remote Control Unit
BKMW-103 Control Panel Extension Kit



BKMW-102 Control Panel Case

Control panel case for BKDW-101, BKMW-101 and HKDW-101

Applicable Models

BKDW-101 Remote Control Panel
BKMW-101 Remote Control Panel
DVW-2000 Digital Betacam Recorder
DVW-2000P Digital Betacam Recorder
DVW-M2000 Digital Betacam Recorder
DVW-M2000P Digital Betacam Recorder
HDW-2000 HDCAM VTR*
HDW-M2000 HDCAM VTR*
HDW-M2000P HDCAM VTR*
HDW-D2000 HDCAM VTR*
HDW-M2100 HDCAM Player*
HDW-M2100P HDCAM Player*
HKDW-101 Remote Control Panel

MSW-2000 MPEG IMX Recorder**
MSW-A2000 MPEG IMX Recorder**
MSW-A2000P MPEG IMX Recorder**
MSW-M2000 MPEG IMX Recorder**
MSW-M2000P MPEG IMX Recorder**
MSW-M2100 MPEG IMX Player**
MSW-M2100P MPEG IMX Player**

*all versions including /20

**all versions including /1



BKMW-103 Control Panel Extension Kit

Control panel extension kit for MSW-2000 series,
DVW-2000 series and HDW-2000 series VTRs

Applicable Models

BKDW-101 Remote Control Panel
BKMW-101 Remote Control Panel
DVW-2000 Digital Betacam Recorder
DVW-2000P Digital Betacam Recorder
DVW-M2000 Digital Betacam Recorder
DVW-M2000P Digital Betacam Recorder
HDW-2000 HDCAM VTR*
HDW-M2000 HDCAM VTR*
HDW-M2000P HDCAM VTR*
HDW-D2000 HDCAM VTR*
HDW-M2100 HDCAM Player*
HDW-M2100P HDCAM Player*
HKDW-101 Remote Control Panel
MSW-2000 MPEG IMX Recorder**
MSW-A2000 MPEG IMX Recorder**
MSW-A2000P MPEG IMX Recorder**
MSW-M2000 MPEG IMX Recorder**
MSW-M2000P MPEG IMX Recorder**
MSW-M2100 MPEG IMX Player**
MSW-M2100P MPEG IMX Player**

*all versions including /20

**all versions including /1



BKMW-104 HD Up-converter Board (*1)

Features

•Allows 1080/59.94i, 1080/50i and 720/59.94p output
from the playback signals of SD 1/2-inch formats^(*),
including Betacam, Betacam SP, Betacam SX and Digital
Betacam as well as MPEG IMX format •Outputs HD 1125
tri-level sync signal as reference signal

(*1) Either this board or BKMW-E3000 board can be installed in an
MSW-2000 series VTR. (*2) Only from the playback-compatible format of the
VTR used.

Applicable Models

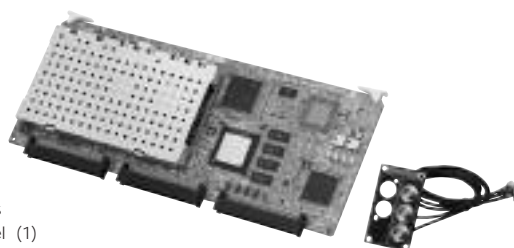
DVW-2000 Digital Betacam Recorder
DVW-2000P Digital Betacam Recorder
DVW-M2000 Digital Betacam Recorder
DVW-M2000P Digital Betacam Recorder
MSW-2000 MPEG IMX Recorder**
MSW-A2000 MPEG IMX Recorder**
MSW-A2000P MPEG IMX Recorder**
MSW-M2000 MPEG IMX Recorder**
MSW-M2000P MPEG IMX Recorder**
MSW-M2100 MPEG IMX Player**
MSW-M2100P MPEG IMX Player**

*all versions including /20

**all versions including /1

Supplied Accessories

SDI/HD-SDI connector panel (1)
SDI INPUT connector masking blank seal
(for player) (1)
VIDEO CONTROL (HD/SD) seal (1)
Attachment screws (6)
Operation and installation guide (1)
Installation manual (1)

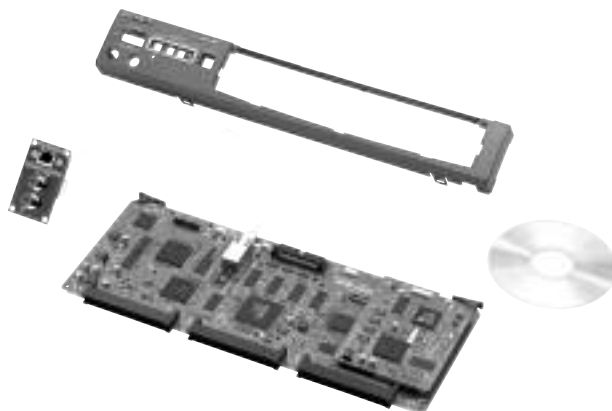


BKMW-E3000 Network Interface Board (option for e-VTR)^(*)

Features

- Adds a Gigabit Ethernet interface to an MSW-2000 series VTR to send and receive AV data as MXF^(*) files across a standard IT network
- Allows MXF file output from all 1/2-inch SD format tapes including Digital Betacam, Betacam SX, Betacam SP, Betacam as well as MPEG IMX^(*)
- Receives MXF files and records AV signals and metadata that are wrapped in MXF files onto an MPEG IMX cassette
- Supports industry-standard network interfaces and protocols including Giga-bit/100Base-TX/10-Base Ethernet, TCP/IP, FTP, HTTP and SNMP
- Simple control of file exchange from a PC using supplied e-VTR Manager software
- Control of e-VTR tape transport from a PC
- Content browsing function allows operators to view any material loaded in any e-VTR on the network as low-rate data
- Remote monitoring of e-VTR status through a network
- Remote maintenance using SNMP protocol through a network

(*) Either this board or BKMW-104 can be installed into an MSW-2000 series VTR
 (**) MXF: Material eXchange Format
 (**) Playback-compatible format depends on the VTR used.



Applicable Models

MSW-2000 MPEG IMX Recorder
 MSW-A2000 MPEG IMX Recorder
 MSW-A2000P MPEG IMX Recorder
 MSW-M2000 MPEG IMX Recorder
 MSW-M2000P MPEG IMX Recorder
 MSW-M2100 MPEG IMX Player
 MSW-M2100P MPEG IMX Player

(all versions including /1)

Supplied Accessories

CD-ROM including e-VTR application software (1)
 Connector panel with RJ-45 connector (1)
 Upper front panel for e-VTR operation (1)

Specifications

General

Power requirements:
 +2.5V DC: 3.0A, +3.4V DC: 3.3A, +6.0V DC: 1.0A
 (supplied from MSW-2000 Series VTR)
 Operating temperature:
 +5 to +40°C (+41 to +104° F)
 Storage temperature:
 -20 to +60° C (-4 to +140° F)
 Operating humidity:
 25 to 80% (no condensation)

Dimensions

Board (W x H):
 355 x 146 mm (14 2/5 x 5 4/5 inches)
 Front panel (W x H x D):
 430 x 70 x 45 mm (17 2/5 x 2 4/5 x 1 4/5 inches)
 Connector panel (W x H):
 72 x 42 mm (2 4/5 x 1 3/5 inches)

Mass

Board:
 Approx. 380 g (13.4 oz)
 Front panel:
 Approx. 130 g (4.6 oz)
 Connector panel:
 Approx. 50 g (1.8 oz)

Interface:

Network Interface, RJ-45, 1000Base-T (GbE), 100Base-TX, 10Base-T

System Requirements for the Supplied e-VTR Application Software

CPU:
 1 GHz or higher
 Memory:
 256MB or higher
 Operating System:
 Windows XP/2000
 Direct X:
 8.11b or higher
 Available hard disc space:
 5 Mb or more
 Monitor resolution:
 XGA (1024 x 768) or more recommended

BKP-L551 Li-ion Battery Adaptor

Features

- Power supply capability from BP-GL/IL/L/M Series battery via XLR-4-pin connector

Applicable Models

PDW-D1 XDCAM Drive Unit



DSBK-1501 Digital Input/Output Board

Features

- Allows Input/Output of SDI, SDTI(QSDI), AES/EBU

Applicable Models

DSR-1500AP DVCAM Editing Recorder

Specifications

Input

SDI/SDTI:

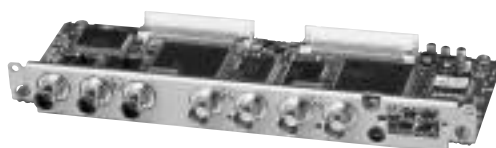
BNC (1), AES/EBU: BNC (2)

Output

SDI/SDTI:

BNC (2)*, AES/EBU: BNC (2)

* SDI and SDTI(QSDI) outputs share the same BNC connectors



DSBK-1505 Analogue Input Board

Features

- A range of analogue interfaces including composite, component, S-Video(Y/C) and two channel analogue audio are provided.

Applicable Models

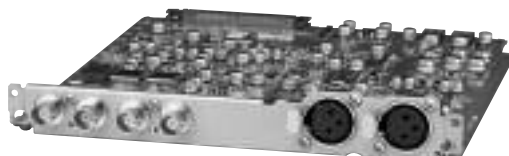
DSR-1500AP DVCAM Editing Recorder

Specifications

Input connectors

BNC (3)

Composite, Component and S-Video share the same BNC connectors.



DSBK-1601 SDI, AES/EBU Output Board

Features

Allows output of SDI (BNC x 2) and AES/EBU (BNC x 2)

Applicable Models

DSR-1600AP Editing Player



DSBK-1801 SDI, AES/EBU Input/Output Board

Features

Allows Input/Output of SDI and AES/EBU

Applicable Models

DSR-1800AP Editing Recorder

Specifications

Input

SDI: BNC (2)

AES/EBU: BNC (2)

Output

SDI: BNC (2)

AES/EBU: BNC(2)



DSBK-1820 HD Up-converter board

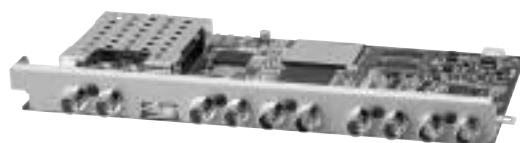
Features

•Enables conversion to 1080i through HD-SDI Output as well as SDI Input/Output and AES/EBU

Applicable Models

DSR-1600AP Editing Player

DSR-1800AP Editing Recorder



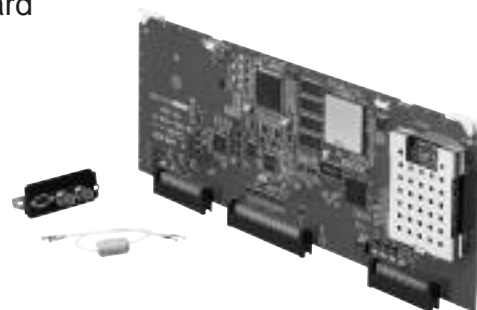
DSBK-2020 HD Up-converter board

Features

•Enables conversion to 1080i through HD-SDI Output

Applicable Models

DSR-2000AP Editing Recorder



DSRM-10 Remote Control Unit

Features

•Provides wired remote control operation for STOP/REC/PAUSE/REW/PLAY/FFWD •JOG/SHUTTLE operation •Enables ± 16 times normal speed in search operation

Applicable Models

DSR-11 Recorder

DSR-25 Recorder

DSR-45AP Recorder

DSR-1500AP Editing Recorder

DSR-50P Portable Recorder

Supplied Accessories

Operating manual (1)

Specifications

Power requirements:

DC 5 V (supplied from the connected VTR)

Power consumption:

50 mW

Remote control:

Stereo mini-plug (with attached cable, length 3 m (10 ft))

Dimensions:

90 (W) \times 46 (H) \times 182 (D) mm
(3 5/8 \times 1 13/16 \times 7 1/4 inches)

Mass:

Approx. 360 g (12 oz)



HKDW-101 Remote Control Panel

Remote control panel for HDW-2000 series VTRs

Applicable Models

HDW-2000 HDCAM VTR
HDW-M2000 HDCAM VTR
HDW-M2000P HDCAM VTR
HDW-D2000 HDCAM VTR
HDW-M2100 HDCAM Player
HDW-M2100P HDCAM Player
(all versions including /20)



HKDW-102 SDTI (HDCAM) Interface Board

Features

- Adds SDTI (HDCAM) input and output capabilities to an HDW-2000 series VTR

Applicable Models

HDW-2000 HDCAM VTR
HDW-M2000 HDCAM VTR
HDW-M2000P HDCAM VTR
HDW-D2000 HDCAM VTR
HDW-M2100 HDCAM Player
HDW-M2100P HDCAM Player
(all versions including /20)

Supplied Accessories

"SDTI (HDCAM)" label (1)
Spacer (5 mm (7/32 inch) (4)
Spacer (10 mm (13/32 inch) (4)
Fitting screw (8)
Cable clamp (1)
Operation and installation guide (1)
Installation manual (1)



HKDW-104 Converter Board

Features

- Allows the HDW-1800 and HDW-D1800 to output converted 720P signals when playing back 1080i material. Also provides 2-3 pull-down capability.

Applicable Models

HDW-1800 HDCAM VTR
HDW-D1800 HDCAM VTR

HKDW-105 i.LINK Interface Board

Features

- Allows the HDW-1800 and HDW-D1800 to accept an HDV 1080i compatible stream via a single i.LINK cable connection, without any conversion.

Applicable Models

HDW-1800 HDCAM VTR
HDW-D1800 HDCAM VTR

PDBK-101 Network Board

Features

- Provides Gigabit Ethernet interface with the PDW-F70 and PDW-F30

Applicable Models

PDW-F70 XDCAM HD Recording Deck

PDW-F30 XDCAM HD Viewing Deck



PDBK-102 MPEG-2 TS In/Out Board

Features

- Allows 25 Mb/s HDV stream (MPEG-2 TS) to be input and output between the PDW-F70/F30 decks and an HDV device

* Only one of the PDBK-102, PDBK-103 or PDBK-104 boards can be installed at any one time.

Applicable Models

PDW-F70 XDCAM HD Recording Deck

PDW-F30 XDCAM HD Viewing Deck



PDBK-103 HD Analogue Component Input Board

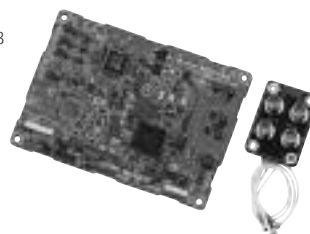
Features

- Provides the HD analogue component and RGB inputs with the PDW-F70 deck (these share the same BNC connector.)

* Only one of the PDBK-102, PDBK-103 or PDBK-104 boards can be installed at any one time.

Applicable Models

PDW-F70 XDCAM HD Recording Deck



PDBK-104 SD Input Upconverter Board

Features

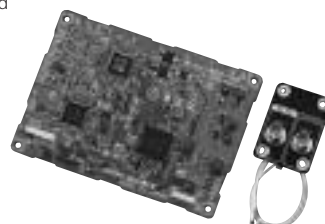
- Provides the SD-SDI and SD composite input with the PDW-F70 deck

* Only one of the PDBK-102, PDBK-103 or PDBK-104 boards can be installed at any one time.

Applicable Models

PDW-F70 XDCAM HD Recording Deck

Note: Only HD recording is possible



RM-280 Editing Controller

The RM-280 is a compact editing controller intended for simple VTR remote control or basic two-machine editing

Features

- Two-machine editing
- Assemble and insert mode
- Four-channel audio editing
- A variety of edit buttons such as "IN- and OUT-POINT ENTRY", "+ and - TRIM", "AUTO EDIT", "PREVIEW/REVIEW", "GO TO", "ALL STOP"
- TC/CTL/RTC (Relative Time Code) editing mode selectable
- Pinch-on-delay time learning capability for accurate timing adjustments of recorder and player edit in-point
- Edit delay time setting
- Cue signal or tally output via a mini-pin port
- Equipped with reference video input for synchronization with other equipment
- VTR remote control function; PLAY, REWIND, FAST-FORWARD, REC, STOP, PAUSE, EDIT, PREROLL
- Multiple system frequencies including 29.97, 25, 24, 23.98 Hz
- Picture search using the jog/shuttle dial for jog, shuttle and variable-speed playback modes
- Can be powered using the supplied AC adaptor or directly from a connected HDW-S280 HDCAM recorder from its DC output
- Easy-to-use keyboard layout provides straightforward operations
- Displays error messages on the VFD display, indicating the type of errors and device name on which the malfunction occurred for instant action to be taken
- The RM-280 supports 2 field mode editing only. It does not support CF (Colour Frame) editing



Applicable Models

HDW-S280 HDCAM Compact Recorder
 DW-2000 series Digital Betacam VTRs
 HDW-2000 series HDCAM VTRs*
 HDW-1800 series HDCAM VTRs
 MSW-2000 series MPEG IMX VTRs**
 PDW-1500 XDCAM Deck
 DSR-45AP DVCAM Recorder
 DSR-1500AP DVCAM Editing Recorder
 DSR-1600AP DVCAM Editing Player
 DSR-1800AP DVCAM Editing Recorder
 DSR-2000AP DVCAM Editing Recorder
 DSR-DR1000AP DVCAM Disk Recorder
 PDW-F70 XDCAM HD Recording Deck
 PDW-F30 XDCAM HD Viewing Deck
 PDW-R1 XDCAM Field Recorder
 SRW-5000 HDCAM SR VTR***

SRW-5500 HDCAM SR VTR***

SRW-1 HDCAM SR Portable VTR****

* all versions including /20

** all versions including /1

*** RM-280 needs SYS version 1.06 or higher

**** Supported as a player only, no PAUSE control available

Supplied Accessories

Operation manual (1)
 9-pin/DC multi-cable (1)
 AC adaptor (1)
 Template (1)

Specifications

Power Requirements
 DC 11 - 17 V
 Power Consumption
 5 W

Mass

600 g (1 lb 5 oz)

Dimensions (w x h x d)

210 x 52 x 161 mm
 (8 1/4 x 2 1/8 x 6 3/8 inches)

Operating Temperature

+5 to +40°C (+41 to +104°F)

Storage Temperature

-20 to +60°C (-4 to +140°F)

Connectors

RS-422A 9-pin remote x2
 Reference video input (BNC) x1
 RS-232C x1
 Mini-jack for REC TALLY or cue signal output x1
 DC input x1

RMM-131 Rack Mount Kit

Rack mount kit for HDW-1800/HDW-2000/
 MSW-2000/Betacam SP/DVCAM series VTRs

Applicable Models

DSR-1600AP Editing Player
 DSR-1800AP Editing Recorder
 DSR-2000AP Editing Recorder
 DW-2000 Digital Betacam Recorder
 DW-2000P Digital Betacam Recorder
 DW-M2000 Digital Betacam Recorder
 DW-M2000P Digital Betacam Recorder
 HDW-1800 HDCAM VTR
 HDW-D1800 HDCAM VTR
 HDW-2000 HDCAM VTR*
 HDW-M2000 HDCAM VTR*
 HDW-M2000P HDCAM VTR*
 HDW-D2000 HDCAM VTR*

HDW-M2100 HDCAM Player*

HDW-M2100P HDCAM Player*

MSW-2000 MPEG IMX Recorder**

MSW-A2000 MPEG IMX Recorder**

MSW-A2000P MPEG IMX Recorder**

MSW-M2000 MPEG IMX Recorder**

MSW-M2000P MPEG IMX Recorder**

MSW-M2100 MPEG IMX Player**

MSW-M2100P MPEG IMX Player**

*all versions including /20

**all versions including /1



SONY

HDXchange 230
Sonaps 231
XpriNS 232

HDXchange Collaborative Editing Solution

HDXchange provides a complete solution for collaborative editing supporting multiple media file formats. HDXchange's open architecture provides a flexible solution that allows for integration with third-party NLEs. It also includes powerful and easy-to-use media management tools, based on rich metadata and low-resolution proxies. HDXchange can easily integrate with archives for seamless capacity expansion. HDXchange's open architecture, floating licenses, and web-based administration tools make the system easy to use, maintain, and expand.

Features

- A full end-to-end solution for collaborative editing with applications for ingesting from iLink sources, importing and exporting material from/to XDCAM decks, searching for and managing material, creating storyboards for export to 3rd party non-linear editors (NLEs), and exporting material to playout servers or archive systems
- Multi-format support including Sony formats XDCAM, XDCAM HD, HDV, DV, and DVCAM as well as MXF, AVI, and QuickTime formats
- Open editing platform with support for Apple Final Cut Pro 5.0 (SD & HD) and Sony Vegas 6.0 (SD only) and non-linear editors
- Powerful media management tools based on rich metadata and low-resolution proxies
- A rich metadata environment, based on the Dublin Core metadata model, allows operators to easily input, modify, and search for material
- Features full integration with XDCAM metadata and proxies
- Easy archive integration with Sony PetaSite for cost effective expansion of managed media
- Easy to configure, use, and expand with server hosted applications and web administration

Supplied

HDXC-CORE SONY SHARED EDIT ENVIRONMENT CORE PK

Pre-configured server including:

HDXchange Administration Services

5 Browser Client Floating Licenses

1 XDCAM Gateway Floating License

1 Logging Client Floating License

2 Export Client Floating Licenses

PDF Manuals

Optional Accessories

HDXC-B030 SONY SHARED EDIT ENVIRONMENT BROWSER SW

HDXC-X030 SONY SHARED EDIT ENVIRONMENT GATEWAY SW

HDXC-L030 SONY SHARED EDIT ENVIRONMENT LOGGING SW

HDXchange



Sonaps Integrated Networked Production System

Sonaps is a fully integrated and scalable workflow-specific system that optimises the processes in planning, capturing, producing and publishing content for broadcast news and sport. It has superior capabilities when compared to many systems available today. Sonaps allows innovative new workflow processes and operational procedures to be developed to further enhance the business performance of its users, reducing time to air, increasing efficiency and allowing greater creative opportunities.

Features

- Fully IT-based networked production system
- Scaleable for inputs, outputs, clients and capacity
- Multi-format operation SD/HD •Faster than real-time ingest and access for XDCam-based content
- Advanced metadata handling, from planning to archive
- File-based MXF content exchange •Classification of material by categories that can be shared by all users
- Integrated audio/video editing with voice over, slow motion and advanced NLE capability
- Browsing of audio/video content from any connected terminal or workstation.
- Field editing, seamless EDL exchange and fast time air for last minute content
- Full MOS integration with newsroom computer systems, including planning, search, retrieve and upload and control of playlist
- On air of playlists manually or under automation control.
- Integration with third-party archiving and asset management
- Integration with third-party automation.
- Reliable and robust IT architecture with no single point of failure
- Fully supported by remote diagnostics, dial-in management, monitoring and upgrade
- Roadmap for future enhancements, expansion and upgrade.

Project Services

Workflow definition and consultancy prior to system design.
Full management of complete project implementation.
Support package can be modelled to specific needs.
Financial models can be tailored to available budgets.

Options

MXF Gateway

Allows file-based contribution and distribution.

MOS Gateway

Allows seamless integration to newsroom systems.

Archive Interface

Allows seamless integration with third-party asset management and archive systems, including robotics with disc or tape media.



XpriNS Advanced non-linear editing

The XPRI NS series of non-linear editors includes a proxy and high-resolution laptop field editor, a journalist's proxy editor, and a high-resolution finishing editor. The XPRI NS family features multi-format support, including native long GOP editing, application-dependant selectable interfaces, and close integration within the XDCAM, and XDCAMHD family of products, together with the SONAPS networked production system.

The XpriNS editor can be used as a dedicated stand-alone workstation or networked with shared SAN-based storage for work-group applications or fully integrated as the proxy and high-resolution editing components within the Sonaps networked production system.

Being completely software based, the XpriNS series provides a single GUI that is uniquely configurable for the user, whether in the field on a laptop, in a newsroom as a plug-in for a newsroom computer system or as a finishing tool for news, sport and magazine programming.

xpriTM
NS Series

Option panels

DMW-C1 Media control bar

This hardware interface can be used to control audio levels, EQ levels, Colour correction parameters and DVE placement.

DMW-C2 Jog and Shuttle panel

The Jog/Shuttle can be used to control both VTR's connected to the XPRI as well as the XPRI clip and timeline editors.

DMW-C3 Audio control panel

This motorised audio panel is used primarily to control audio levels and audio routing. It can both "read" and "write" to the timeline.

DMW-C4 Trackball control panel

The trackball option can interface with both the DVE FX editor and the advanced colour correctors.

DMW-C5 Linear-like editing control panel

The C5 is a linear like edit controller which is optimised to replace many traditional mouse and keyboard shortcuts.

Option boards

DMW-IF101 HD/SD interface

Peripherals

DMW-EX02 9-pin remote interface



PetaSite	234
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PetaSite Scalable Enterprise Storage System

Highly scalable and easy to manage, Sony PetaSite tape library solutions can help you protect your precious media assets – and generate fresh sources of value for your business – for years to come. And naturally, PetaSite is HD-ready... so an investment in PetaSite today lets you embrace the opportunities of tomorrow's High Definition world with confidence.

Features

- Over 400TB of storage per square metre – equivalent to 36,000 hours of 25Mbps material
- High performance with up to 400 cartridge exchanges/hour and single stream transfer rates of up to 80MB/s
- Complete format freedom with the choice of SAIT-1/SAIT-2 and LTO-3 tape drives or a mixture
- Enterprise-grade reliability, with RAS features designed for uninterrupted 24 hour operation
- Cost effective expansion to 2.4PB or over 200,000 hours of 25Mbps material in a single five metre footprint
- Flexible administration with support for SNMP, email notification and remote administration
- Fits in with your infrastructure with support for standard IT protocols including SCSI, Fibre Channel and IP communication

PetaSite™



Base Models

CSM200B PetaSite 216 Slots No Drives
CSM100B PetaSite 108 Slots No Drives
CSM60B PetaSite 60 Slots No Drives

Supplied Accessories

DKNB200S SCSI LVD Interface card for PSC server
DZCPSC2I PetaSite PSC2 V4 S/W on CD-ROM

Optional Accessories

CSM200C PETASITE S200 CARTRIDGE CONSOLE
CSM200D PETASITE S200 DRIVE CONSOLE
CSMU100B PETASITE MODEL S60 TO S100 UPGRADE
CSMU200B PETASITE MODEL S100 TO S200 UPGRADE
CSMADR100S PETASITE S-AIT DRIVE - SCSI
CSMADR130F PETASITE S-AIT DRIVE - FIBRE CHANNEL
CSMADRLTO3F LTO-3 Fibre Drive for Sony PetaSite
CSMADRLTO3S LTO-3 SCSI Drive for Sony PetaSite
CSMADR230F PetaSite SAIT-2 Drive (Fibre)
CSMADR200S PetaSite SAIT-2 Drive (SCSI)
CSMABTLT PETASITE EXTENSION BELT (4-7 UNITS)
CSMABLTS PETASITE EXTENSION BELT (1-3 UNITS)
CSMACBLL PETASITE EXTENSION CABLE KIT (4-7 units)
CSMACBLS PETASITE EXTENSION CABLE KIT (1-3 units)
CSMADIF PETASITE REDUNDANT DRIVE CONTROL UNIT
CSMAPSD PETASITE REDUNDANT POWER UNIT - DRIVE
CSMAPSL PETASITE REDUNDANT POWER UNIT - LIBRARY
COMPAQ PC PSC SERVER HARDWARE
DKNB200S SCSI LVD Interface card for PSC server
DZCPSC2I PetaSite PSC2 V4 S/W on CD-ROM



Digital Video Switchers & Accessories

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BKDS-9162	255	MKS-8031ATB	276
BKDS-9210	255	MKS-8032A	277
BKDS-9470	256	MKS-8033A	277
BZS-9471	256	MKS-8034ADK	278
MKS-8110M	256	MKS-8034AFB	278
MKS-8110SD	257	MKS-8035A	279
MKS-8111M	257	MKS-8040A	279
MKS-8111SD	257	MKS-8041A	280
MKS-8160A	257	MKS-8075	280
MKS-8161M	258	MKS-8076	281
MKS-8162A	258	MKS-8080	281
MKS-8170M	258	MKS-8082	282
MKS-8210A	258	MKS-9011A	283
MKS-8440A	258	MKS-9012A	284
BZS-8250	259	SWC-5002	285
BZS-9250	259	SWC-5005	285
BZPS-8000	260	SWC-5010	285
BZPS-8001	261	MKS-2050	286
HK-PSU04	261	MKS-8050	286
MVE-8000A	262	BZS-8050	286
HK-PSU02	263		
MKE-8020A	263		

AWS-G500 Live Content Producer

Features

The Anycast Station is an all-in-one content creation tool designed for large projection applications such as church productions, product promotions, event and live staging, music clip creation, conferences, seminars, and distance learning •It comprises a high-quality video switcher, an audio mixer, a large LCD display, and a streaming encoder and server - all packed into an attache case size chassis weighing only about 15 lb. (7 kg) •The video switcher provides 4:2:2 8-bit processing, 6 primary inputs plus one still picture source, 1 ME with 1 keyer (selectable between Linear Key/Luminance Key/Chrominance Key) and 1 DSK with 1 fixed station logo •The audio mixer provides 48 kHz/24-bit processing, 6 stereo channel input mixing, 6 channel faders and 1 master fader •High-resolution (1280 x 1024 pixel) internal processing for seamless switching between video and PC sources •Versatile input/output (Input: Composite, S-Video, DV, and RGB/ Output: Composite, S-Video, RGB) •VISCA control functions for compatible Sony Pan/Tilt/Zoom cameras •A large LCD screen for PGM and PVW monitoring, plus 7 windows for input source and one internal still picture source monitoring •Built-in streaming encoder and streaming server function (optional feature) •Easy operation with one integrated control panel and the multi-window LCD •Multi-camera recording for convenient nonlinear editing.



Supplied Accessories

Installation Guide (1)
Pin to BNC Connector (4)

Optional Accessories

BZAW-500 Keyboard / Software Kit
BKAW-550 PC Video Interface Module
BKAW-570 SD Video Interface Module

Specifications

- General -

Model

AWS-G500

Power Requirements

AC 100-240 V, 50/60 Hz

Operating Voltage

AC 90-260 V, 47/63 Hz

Power Consumption

160 W

Operating Temperature

0 to 40 °C (32 to 104 °F)

Dimensions (W x H x D)

424 x 114 x 354 mm

Mass

Approximately 7.0 kg (15 lb 7 oz)

- Video Signals -

VIDEO INPUTS (in exfactory configuration)

Composite

BNC Type x 4

Video: 1.0 Vp-p, 75 Ω , Sync negative

S-Video

DIN Type x 4

Y: 1.0 Vp-p, 75 Ω , Sync negative

C: 0.286 Vp-p at burst, 75 Ω (System Mode 59.94 Hz)

C: 0.3 Vp-p at burst, 75 Ω (System Mode 50 Hz)

DV

IEEE 1394 4-pin Type x 4

IEC 61883-2 equiv.

RGB

D-Sub Shrunk 15-pin Type x 2 (Female)

XGA, SXGA

VIDEO OUTPUTS

Composite

BNC Type x 1

Video: 1.0 Vp-p, 75 Ω , Sync negative

S-Video

DIN Type x 1

Y: 1.0 Vp-p, 75 Ω , Sync negative

C: 0.286 Vp-p at burst, 75 Ω (59.94 Hz)

C: 0.3 Vp-p at burst, 75 Ω (50 Hz)

RGB

Extended D-Sub 15-pin Type x 2 (Female)

XGA, SXGA

BB OUT

BNC Type x 2

Sync: 0.286 Vp-p, 75 Ω , Sync negative (59.94 Hz)

Sync: 0.3 Vp-p, 75 Ω , Sync negative (50 Hz)

C: 0.286 Vp-p at burst, 75 Ω (59.94 Hz)

C: 0.3 Vp-p at burst, 75 Ω (50 Hz)

Recorder Port

HDD/DV

i.LINK: IEEE 1394 6-pin Type x 2

(in exfactory configuration)

HDD IF: SBP2

- Audio Signals -

AUDIO INPUTS

Analogue Inputs 1-2

XLR/TRS Combo Type x 2

Ref. Level: +4 dBu, -20 dBu, -44 dBu

Mic. Power: +48 V

Analogue Inputs 3-6

TRS Type x 4 / Ref. Level: +4 dBu, -20 dBu, -44 dBu

Analogue Inputs 7-8

Pin x 2 / Ref. Level: -10 dBs

AUDIO OUTPUTS

PGM OUT

TRS Type x 2 / Ref.: +4 dBu / Impedance: 150 Ω

MIX OUT

Pin Type x 2 / Ref.: -10 dBs / Impedance: 10 k Ω

AUX OUT

TRS Type x 2 / Ref.: +4 dBu / Impedance: 150 Ω

MONITOR OUT

TRS Type x 2 / Ref.: +4 dBu / Impedance: 150 Ω

HEADPHONES

1/4 inches Stereo Phone Jack Type x 2

70 mW x 2 / Impedance: 47 Ω

INTERCOM

D-Sub 9-pin Type (Female) / Original Parallel I/O

- Other Interfaces -

NETWORK

RJ-45 Type x 1, 10/100base-TX

USB1.1

USB A Type x 2, USB1.1 equiv.

RGB(GUI)

D-Sub Shrunk 15-pin (Female), 1280 x 800, 60 Hz

REMOTE

D-Sub 9-pin (Male), RS-232C

FACTORY USE

D-Sub 15-pin (Male), Original Parallel I/O

MEMORY STICK

Memory Stick TM Slot

*Memory Stick Pro is not supported.

VISCA

DIN 8-pin Type x1

Supports Sony VISCA camera commands.

LCD

15.4" High Brightness LCD, 1280 x 800, 60 Hz

Speaker

Built-In Speaker x 2, Size: 20 x 40 mm

BKAW-550 PC Video Interface Module

Applicable Models

AWS-G500 Live Content Producer

Specifications

RGB

D-sub Shrunk 15-pin Type x 2 (Female),
XGA, SXGA



BKAW-570 SD Video Interface Module

Applicable Models

AWS-G500 Live Content Producer

Specifications

Composite

BNC Type x 2

Video: 1.0 Vp-p, 75 Ω , Sync negative

S-Video

DIN Type x 2

Y: 1.0 Vp-p, 75 Ω , Sync negative

C: 0.286 Vp-p at burst, 75 Ω , (System
Mode 59.94 Hz)

C: 0.3 Vp-p at burst, 75 Ω , (System Mode
50 Hz)

DV

IEEE 1394 4-pin Type x 2

IEC 61883-2 equiv.

HDD/DV

I.LINK: IEEE 1394 6-pin Type x 2

HDD IF: SBP2



DFS-800 Standard Definition DME Switcher

The DFS-800 is a powerful DME switcher that - despite its small footprint and affordable price - provides a wide variety of switcher functions, exceptional system versatility, and exceptional creative power. It is equipped with eight SD-SDI inputs and outputs as standard; however, as user requirements grow, these can be increased to 16 by adding optional expansion boards. Other standard features include six keyers (each capable of chromakeying), frame memory and a six-channel 3D DME unit. With its creative capability and high-quality special effects, the DFS-800 is designed to be a powerful, yet cost-effective tool for live events, small-scale production studios and editing suites.



Features

•Powerful Mix/Effect Functionality •Flexible Input/Output Configurations •Keyers •Wide Range of Creative Effects Including 3D •Powerful Frame Memory Function •Optional "Pre-combiner" Function •Compact and Intuitive Control Panel

Other Features

•Four colour background generators •Eight GPI inputs and 24 parallel tally outputs •Serial port for control from editors •Adjustable levels of process amplifier and white clip •USB port on the control panel for connecting USB flash memory drive and mouse •Storage of up to 100 patterns of sequences containing 31 settable key frames •96-event memory can be easily recalled using direct buttons •2-RU processor unit

Supplied Accessories

Control Panel connection cable
Rack mount brackets
Operation manual

Optional Accessories

BKDF-810 4 Digital Video Input Board
BKDF-811 2 Analogue Video Input Board
BKDF-840 16 Input DME Board (Pre-combiner)
BKDF-860 4 Digital Video Output Board
BKDF-861 2 Analogue Video Output Board

Specifications

General

Power Requirement
AC 100 V to 240 V $\pm 10\%$, 50/60 Hz

Power Consumption
Switcher Processor:
100 W (max. 160 W)
Control Panel:
50 W

Operating Temperature
5 to 40° C (41 to 104° F)

Operating Humidity
30 to 90 % (no condensation)

Dimensions (W x H x D)
Switcher Processor:
430 x 88 x 425 mm
(17 x 3 1/2 x 16 3/4 inches)
Control Panel:
430 x 155.8 x 221 mm
(17 x 6 1/4 x 8 3/4 inches)

Mass
Switcher Processor:
Approx. 15 kg (33 lb 1 oz)
Control Panel:
Approx. 5 kg (11 lb)

Television Standard
525 / 60 (NTSC), 625 / 50 (PAL)
(Selectable at menu)

Signal Processing
4:2:2 digital component, 10-bit

Input Signals

Video Inputs
8 standard inputs, optionally expandable 16 inputs
Digital component:
270 Mbps, 75 Ω , BNC

Video Inputs (option)
See the board configuration
Digital component:
270 Mbps, 75 Ω , BNC
Analogue component:
Y: 1.0 Vp-p, B-Y/R-Y: 0.7 Vp-p, BNC
Analogue composite:
1.0 Vp-p, 75 Ω , BNC

Reference Input
Analogue black burst:
0.429 Vp-p (NTSC) / 0.45 Vp-p (PAL).
75 Ω or Loopthrough, BNC

Output Signals

Video Output
8 standard output
(PGM x 2, PREV, Clean, AUX x 4), optional expandable 16 outputs
Digital component:
270 Mbps, 75 Ω , BNC

Video Output (option)
See the board configuration
Digital component:
270 Mbps, 75 Ω , BNC
Analogue component:
Y: 1.0 Vp-p, B-Y / R-Y: 0.7 Vp-p, BNC

Analogue composite:

1.0 Vp-p, 75 Ω , BNC
RGB+SYNC: R/G/B:
0.7 Vp-p, 75 Ω , BNC

Reference Output
Analogue black burst:
0.429 Vp-p (NTSC) /
0.45 Vp-p (PAL), 75 Ω or Loopthrough, BNC

Quantization
Y: 10-bit, C: 10-bit, Key: 10-bit

I/O Delay
1H (When FS, edge/shadow and DME not applied to output)
Max. 4 frames

Control Signals

Switcher Processor
Control Panel:
Ethernet 10 / 100BASE-T, RJ-45 x 1

Editor:
D-sub 9 pin (female) x 1

GPI IN/TALLY:
37-pin D-sub (female) x 1
(8 inputs / 24 outputs)

Control Panel
Switcher:
Ethernet, 10/100BASE-TX, RJ-45 x 1

VGA:
D-sub 15-pin (female) x 1

USB:
USB1.1 or 2.0, "A" type (female) x 1

BKDF-810 Digital Video Input Board

One BKDF-810 board provides four SD-SDI inputs.

Applicable Models

DFS-800 Standard Definition DME Switcher

BKDF-811 2 Analogue Video Input Board

One BKDF-811 board provides two Analogue inputs
(either composite x2, or composite x1 and component x1.)

Applicable Models

DFS-800 Standard Definition DME Switcher

BKDF-840 16 Input DME Board (Pre-combiner)

The optional BKDF-840 board provides a powerful pre-combiner function to make complex composition available on the small switcher. With the pre-combiner function, all sixteen inputs can be combined in a single image, which can then be used as a re-entry input.

Applicable Models

DFS-800 Standard Definition DME Switcher

BKDF-860 4 Digital Video Output Board

One BKDF-860 board provides four SD-SDI outputs.

Applicable Models

DFS-800 Standard Definition DME Switcher

BKDF-861 2 Analogue Video Output Board

One BKDF-861 board provides two Analogue outputs
(either composite x2, or composite x1 and component x1.)

Applicable Models

DFS-800 Standard Definition DME Switcher

MFS-2000 Multi-Format Switcher Processor

The MFS-2000 is a 3RU high compact and low-cost multi-format switcher that is suitable for use in small-scale OB vehicles, production studios and editing suites.

Features

- High performance compact multi-format switcher
- Both multi-format and standard definition configurations are supported
- A standard definition configuration can be upgraded to a multi-format system with minimal cost by upgrading the software
- Useful preset effect patterns are provided as preset wipes and DME wipe patterns
- The FlexiPad control panel enables operations such as Macro, M/E and Effect Snapshot
- Colour touch-screen LCD panel
- Serial and parallel tally outputs
- Both the control panel and switcher processor can be fitted with redundant power supply units
- The optional 2-channel DME provides the following stunning effects: 2D/3D linear and nonlinear transforms, Digital SPARKLE, LIGHTING, SHADOW, TRAIL, Digital SKETCH, GLOW, and METAL
- The optional frame memory can store a remarkable 435 frames of HD images or 2184 frames of SD images
- Three types of control panels are provided; MKS-2010 1 M/E control panel, MKS-2015 1.5 M/E control panel, and MKS-2017 1.5 M/E wide control panel



Supplied Accessories

- AC power cord (1)
- Operation manual (1)

Optional Accessories

- MKS-2110M Input/Output Connector Board (MFS-2000)
- MKS-2440 Frame Memory Board Set (MFS-2000)
- MKS-2470 DME Board Set
- MKS-2700 Device Control Unit
- HK-PSU01 Power Supply Unit
- HK-PSU02 Power Supply Unit
- HK-PSU11 Power Supply Unit (Control Panel)
- MKS-2010 1 M/E Control Panel (MFS-2000)
- MKS-2015 1.5 M/E Control Panel (MFS-2000)
- MKS-2017 1.5 M/E Wide Control Panel (MFS-2000)

Specifications

General

- Power requirements:
 - AC 100 V to 240 V $\pm 10\%$ 50/60 Hz
- Power consumption:
 - 4.5 to 2.1 A (fully loaded)
- Operating temperature:
 - 5 °C to 40 °C (41 °F to 104 °F)
- Storage temperature
 - 20 °C to +60 °C (-4 °F to +140 °F)
- Dimensions (W x H x D):
 - 440 x 132.4 x 520 mm
 - (17 3/8 x 5 1/4 x 20 1/2 inches)
- Mass:
 - 22 kg (48 lb 8 oz, fully loaded)

Input/output connectors

- Primary inputs:
 - Max. 16, BNC x 1 each
 - SMPT292M (HDTV), SMPTE259-C (SDTV)

SDI video outputs:

- Max. 8, BNC x 2 each
- SMPT292M (HDTV), SMPTE259-C (SDTV)

Reference inputs:

- BNC x 2, 75 Ω with loop-through
- HDTV system: HD tri-level sync, Analogue black burst, or analogue sync
- SDTV system: Analogue black burst or analogue sync

Reference output:

- BNC x 1, 75 Ω
- HDTV system: HD tri-level sync
- SDTV system: Analogue sync

Control signals

Switcher interface:

- Control LAN: RJ-45 x 1, 100BASE-TX
- Data LAN: RJ-45 x 1, 100BASE-TX

DME interface:

- Control LAN: RJ-45 x 1, 100BASE-TX
- Data LAN: RJ-45 x 1, 100BASE-TX

GPI:

- D-sub 25-pin (female) x 1, TTL level inputs x 8,
- Relay contact outputs x 4, Open collector outputs x 4

Tally:

- D-sub 25-pin (female) x 1, Relay contact outputs x 4, Open collector outputs x 4

Serial tally:

- D-sub 9-pin (female) x 1, RS-422A

HK-PSU11 Power Supply Unit (Control Panel)

Redundant power supply unit for Control Panel Unit that can be used as second power supply unit for the MKS-2010, MKS-2015, and MKS-2017 Control Panels.

Applicable Models

MFS-2000 Multi-Format Switcher Processor
MKS-2010 1 M/E Control Panel (MFS-2000)
MKS-2015 1.5 M/E Control Panel (MFS-2000)
MKS-2017 1.5 M/E Wide Control Panel (MFS-2000)

Supplied Accessories

Installation Guide (1) (1)

Specifications

General

Operating temperature:
5 to 40 °C (41 to 104 °F)
Storage temperature:
- 20 to 60 °C (- 4 to 140 °F)
Operating humidity:
10% to 90% (nocondensation)

MKS-2010 1 M/E Control Panel (MFS-2000)

The MKS-2010 is a compact 1 M/E Control Panel which is 19 inches in width and offers 12-crosspoint buttons. Its FlexiPad control panel is equipped with colour LCD buttons that indicate assigned functions to give users extremely intuitive operation. An easy-to-use colour touch-screen LCD panel provides users with effective and straightforward menu control.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

Optional Accessories

HK-PSU11 Power Supply Unit (Control Panel)

Specifications

General

Power consumption:

1.0 to 0.5 A

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to +140 °F)

Operation humidity:

10% to 90% RH

Dimensions (W x H x D):

440 x 167.5 x 353.9 mm (17 3/8 x 6 5/8 x 14 inches)

Mass:

10.3 kg (22 lb 11 oz)

Input/output connectors

Reference inputs

BNC connector x 2, 75Ω with

loop-through

HDTV system: HD tri-level sync,

Analogue black burst, or analogue sync

SDTV system: Analogue black burst or

analogue sync

Ext display output:

Mini D-sub 15-pin x 1, Analogue RGB interface

Control signals

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Device:

USB type A x 1, compliance with USB 1.1

Remote:

BNC connector x 1, S-BUS

GPI:

D-sub 25-pin (female) x 1, TTL level

inputs x 8, Relay contact outputs x 4,

Open collector outputs x 4



MKS-2015 1.5 M/E Control Panel (MFS-2000)

The MKS-2015 is a compact 1.5 M/E Control Panel which is 19 inches in width and offers 12-crosspoint buttons. Its FlexiPad control panel is equipped with colour LCD buttons that indicate assigned functions to give users extremely intuitive operation. An easy-to-use colour touch-screen LCD panel provides users with effective and straightforward menu control.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

Optional Accessories

HK-PSU11 Power Supply Unit (Control Panel)

Specifications

General

Power consumption:

1.0 to 0.5 A

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to +140 °F)

Operation humidity:

10% to 90% RH

Dimensions (W x H x D):

440 x 167.5 x 448.1 mm (17 3/8 x 6 5/8 x 17 3/4 inches)

Mass:

11.3 kg (24 lb 15 oz)

Input/output connectors

Reference inputs

BNC type x 2, 75Ω with loop-through

HDTV system: HD tri-level sync,

Analogue black burst, or analogue sync

SDTV system: Analogue black burst or analogue sync

Ext display output:

Mini D-sub 15-pin x 1, Analogue RGB interface

Control signals

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Device:

USB type A x 1, compliance with USB 1.1

Remote:

BNC connector x 1, S-BUS

GPI:

D-sub 25-pin (female) x 1, TTL level inputs x 8, Relay contact outputs x 4, Open collector outputs x 4



MKS-2017 1.5 M/E Wide Control Panel (MFS-2000)

The MKS-2017 is a compact 1.5 M/E Wide Control Panel which is 576-mm width and offers 20-crosspoint buttons. Its FlexiPad control panel is equipped with colour LCD buttons that indicate assigned functions to give users extremely intuitive operation. An easy-to-use colour touch-screen LCD panel provides users with effective and straightforward menu control.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

Optional Accessories

HK-PSU11 Power Supply Unit (Control Panel)

Specifications

General

Power consumption:

1.0 to 0.6 A

Operating temperature:

5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:

-20 °C to +60 °C (-4 °F to +140 °F)

Operation humidity:

10% to 90% RH

Dimensions (W x H x D):

576 x 167.5 x 448.1 mm (22 3/4 x 6 5/8 x 17 3/4 inches)

Mass:

12.6 kg (27 lb 12 oz)

Input/output connectors

Reference inputs

BNC type x 2, 75Ω with loop-through

HDTV system: HD tri-level sync,

Analogue black burst, or analogue sync

SDTV system: Analogue black burst or analogue sync

Ext display output:

Mini D-sub 15-pin x 1, Analogue RGB interface

Control signals

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Device:

USB type A x 1, compliance with USB 1.1

Remote:

BNC connector x 1, S-BUS

GPI:

D-sub 25-pin (female) x 1, TTL level

inputs x 8, Relay contact outputs x 4,

Open collector outputs x 4



MKS-2110M Input/Output Connector Board (MFS-2000)

The optional MKS-2110M Input/Output Connector Board provides 8 SDI input connectors and 4 SDI output connectors to the MFS-2000 Series Multi-Format Switchers.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

Specifications

Input/output connectors

SDI video inputs:

Max.8, BNC connector x1 each

SMPT292M(HDTV), SMPT259-C(SDTV)

SDI video outputs:

Max.4, BNC connector x2 each

SMPT292M(HDTV), SMPT259-C(SDTV)

MKS-2420M Colour Corrector Board

•Optional MKS-2440 board is required

Applicable Models

MFS-2000 Multi-Format Switcher Processor

MKS-2440 Frame Memory Board Set (MFS-2000)

The MKS-2440 Frame Memory Board Set provides powerful 6-channel frame memory with animation capability to the MFS-2000 Series Multi-Format Switchers. The MKS-2440 offers two channel-source busses and six channel outputs with re-position capability. The frame memory stores 435 frames of HD images which translates into approximately 15 seconds at 1080/59.94i, or 2184 frames of SD images which translates into approximately 73 seconds at 480i/59.94.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

Specifications

Control signals

Image file LAN:

RJ-45 x 1, 100BASE-TX

Device:

IEEE1394 6-pin x 1

MKS-2470 DME Board Set

The MKS-2470 DME Board Set provides state-of-the-art integrated 2-channel effects as preset DME patterns to the MFS-2000 Series Multi-Format Switchers. The MKS-2470 provides the following stunning effects: 2D/3D linear and nonlinear transforms, Digital SPARKLE, LIGHTING, SHADOW, TRAIL, Digital SKETCH, GLOW, and METAL.

Applicable Models

MFS-2000 Multi-Format Switcher Processor

BZS-2000M Upgrade Software from SD to Multi Format Configuration

Applicable Models
MFS-2000 Multi-Format Switcher Processor

BZS-2470M DME Upgrade Software from SD to Multi Format Configuration

Applicable Models
MFS-2000 Multi-Format Switcher Processor

BZS-2440M Upgrade Software from SD to Multi Format Configuration

Applicable Models
MFS-2000 Multi-Format Switcher Processor

MVS-8000A Multi-Format Switcher Processor

The MVS-8000A is a multi-format switcher processor with a compact frame size only 8 RU high. The MVS-8000A offers a variety of option boards for flexible configurations from 2M/E to 4M/E. The MVS-8000A works as the main processor of the MVS-8000A switcher system with the CCP-8000/CCP-9000 Center Control Panel, MVE-8000A/MVE-9000 Multi Format DME Processor, and MKS-8700/MKS-2700 Device Control Unit.

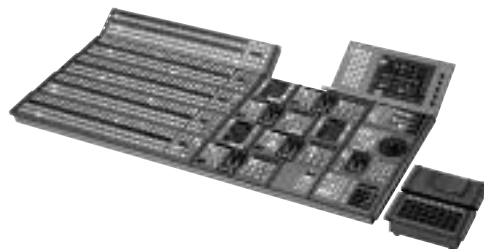
Features

- Multi-format capability: 1080i/60, 59.94, 50, 1080p/30, 29.97, 25, 24, 23.976, 720p/59.94, 480i/59.94, 576i/50
- 2-, 2.5-, 3-, 3.5-, or 4-Mix/Effects configurations
- Layout free CCP-8000 series control panels
- Creative M/E functionality: Four full function keyers per M/E, Multiple M/E Program output configurations
- Independent M/E functionality, 4:3 / 16:9, Crosspoint Assignments and Bus Toggle on/off, Snapshots, Keyframe and various setups
- Up to 80 inputs and 56 outputs (including 8 monitor outputs)
- Integrated device control for VTRs, Digital Disc Recorders, Digital Multi-Effects, Routing Switchers and more
- Multi-panel / Multi-processor operations
- Can store 58 frames of HD images
- The frame memory systems has eight simultaneous outputs
- Programmable Macro capability supported
- Integrated 3D DME or external DME control
- Remote maintenance and image file exchange via Ethernet network
- User programmable tally conditions and multi-level tally

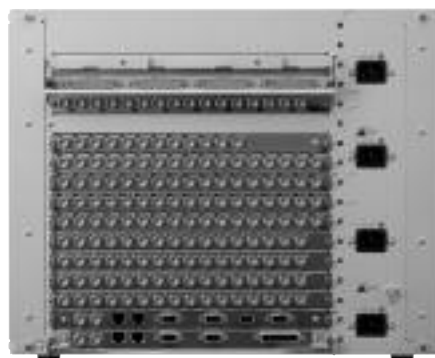
Supplied Accessories

75 Ω terminator (1)
 Bracket (4)
 Support angle (2)
 Screw (+B 4 x 10) (8)
 Screw (+PSW 4 x 10) (8)
 Operation manual (1)
 Installation manual (1)

For full list of options please refer to following product pages.



MVS Switcher Control Panel



MVS-8000A Multi-Format Switcher Processor

Digital Video Switchers & Accessories

Specifications

General

Power requirements:

100-240 V AC +/- 10%, 50/60 Hz

Power consumption

MVS-8000A Switcher processor:

15 to 6.25 A

MVE-8000A DME processor:

2.5 to 1.0 A

MVE-9000 DME processor:

6.0 to 2.5 A

MKS-8700 Device control unit:

1.4 to 0.8A

MKS-2700 Device control unit:

5.0 to 2.1A

Dimensions (W x H x D, without projection)

MVS-8000A Switcher processor:

482 x 354 x 520 mm

(19 x 14 x 20 1/2 inches)

MVE-8000A DME processor:

440 x 87.5 x 520 mm

(17 3/8 x 3 1/2 x 20 1/2 inches)

Main panel

4 M/E, 32 crosspoint buttons:

1443 (with Mount Bracket) x 98 (max.) x

528 mm

(56 7/8 x 3 7/8 x 20 7/8 inches)

3 M/E, 32 crosspoint buttons:

1443 (with mounting bracket) x 98 (max.)

x 528 mm

(56 7/8 x 3 7/8 x 20 7/8 inches)

2 M/E, 24 crosspoint buttons:

1291 (with mounting bracket) x 92 (max.)

x 396 mm

(50 7/8 x 3 5/8 x 15 5/8 inches)

AUX BUS panel

32 crosspoint buttons:

782 (with mounting bracket) x 132 x 80

(max.) mm

(30 7/8 x 5 1/4 x 3 1/4 inches)

24 crosspoint buttons:

630 (with mounting bracket) x 132 x 80

(max.) mm

(24 7/8 x 5 1/4 x 3 1/4 inches)

Menu panel:

424 x 220 x 46 mm

(16 3/4 x 83/4 x 1 13/16 inches)

Memory card/USB adaptor:

263 (with mounting bracket) x132 x 78.5

mm

(10 3/8 x 5 1/4 x 3 1/8 inches)

Extension adaptor:

263 (with mounting bracket) x132 x 78.5 mm

(10 3/8 x 5 1/4 x 3 1/8 inches)

MKS-8700 Device control unit:

482 x 132 x 520 mm

(19 x 5 1/4 x 20 1/2 inches)

MKS-2700 Device control unit:

440 x 43.6 x 520 mm

(17 3/8 x 1 3/4 x 20 1/2 inches)

Mass

MVS-8000A Switcher processor:

Approx. 51 kg (112 lb 7 oz) (fully loaded)

MVE-8000A DME processor:

Approx. 16 kg (35 lb 4 oz) (fully loaded)

Main panel (4 M/E, 32 crosspoint buttons):

Approx. 30 kg (66 lb 2 oz)

AUX BUS panel (32 crosspoint buttons):

Approx. 3.7 kg (8 lb 2 oz)

Menu panel:

Approx. 2.2 kg (4 lb 13 oz)

Extension adaptor (with fader):

Approx. 1.5 kg (3 lb 4 oz) (with module)

Memory card/USB adaptor:

Approx. 1.2 kg (2 lb 10 oz) (with module)

MKS-8700 Device control unit:

Approx. 8 kg (17 lb 10 oz)

MKS-2700 Device control unit:

Approx. 9.8 kg (21 lb 10 oz) (fully loaded)

Operation temperature:

+5 °C to +40 °C (+41°F to +104°F)

Operating humidity:

10% to 90% (non-condensing)

Serial digital video inputs

MVS-8000A Switcher processor

Primary Inputs:

Max. 80, BNC x 1 each,

SMPTE292M (HDTV), SMPTE259M-C

(SDTV)

Serial digital video outputs

MVS-8000A Switcher processor

Assignable outputs:

Max. 48,

OUT 1 to 4, 13 to 16, 25 to 28, 37 to 40:

BNC x 2 each

OUT 5 to 12, 17 to 24, 29 to 36, 41 to 48:

BNC x 1 each

SMPTE292M (HDTV), SMPTE259M-C

(SDTV)

Monitor outputs:

Max. 12, BNC x 2 each

SMPTE292M (HDTV), SMPTE259M-C

(SDTV)

Dedicated switcher/DME video I/O

MVS-8000A Switcher processor

Integrated DME I/O:

68-pin x 4, LVDS

MVE-8000A DME processor

Digital video I/O:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2),

LVDS

MVE-9000 DME processor

Digital video I/O:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2),

LVDS

Reference

Switcher processor, DME processor, system

control unit, device control unit

Reference input:

BNC x 2, 75 Ω with loop-through output

HDTV systems: HD tri-level sync/SDTV

analogue sync

SDTV systems: Analogue black

burst/analogue sync

Switcher processor

Reference output:

BNC x 1, 75 Ω

HDTV systems: HD tri-level sync

SDTV systems: Analogue sync

System interface

MVS-8000A Switcher processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Remote 1:

D-sub 9-pin, RS-422A

Remote 2:

D-sub 9-pin, RS-422A

Remote 3:

D-sub 9-pin, RS-422A

Remote 4:

D-sub 9-pin, RS-422A

Terminal:

D-sub 9-pin, RS-232C

GPI:

D-sub 25-pin, TTL level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

Extension:

BNC x 1

MVE-8000A DME processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin, TTL level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

MVE-9000 DME processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin x 2, dry contact or open

collector inputs x 16 /

relay contact outputs x 8 /

open collector outputs x 8

CCP-8000 Series System control unit

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

GPI:

D-sub 25-pin, TTL Level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

Remote:

BNC x 1, S-BUS

LTC:

BNC x 1

Device:

USB type A

MKS-8700 Device control unit

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Serial tally 1:

D-sub 9-pin x 1, RS-422A

Serial tally 2:

D-sub 9-pin x 1, RS-422A

TALLY/GPI inputs:

D-sub 37-pin x 3, TTL level inputs x 34 each

TALLY/GPI outputs *:

D-sub 37-pin, relay contact outputs 18ch,

up to 270 ch in step of 5 ch in a frame

Remote*:

D-sub 9-pin, RS-422A, various protocols,

up to 30 ports in steps of 6 ports in a frame

MKS-2700 Device control unit

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

TALLY/GPI inputs:

D-sub 37-pin x 1, TTL level inputs x 34

TALLY/GPI outputs :

D-sub 37-pin x 2, TTL level inputs x 18

each

Remote:

D-sub 9-pin x 6, RS-422A, various protocols

* TALLY/GPI and REMOTE ports are alternatively installed. Mixed configuration of TALLY/GPI and REMOTE ports is supported.

MVS-8000ASF Multi-Format Switcher Processor

The MVS-8000ASF is a multi-format switcher processor with a compact frame size only 4 RU high. The MVS-8000ASF offers a variety of option boards for flexible configurations from 1M/E to 2.5M/E. The MVS-8000ASF works as the main processor of the MVS-8000ASF switcher system with the CCP-8000/CCP-9000 Center Control Panel, MVE-8000A/MVE-9000 Multi Format DME Processor, and MKS-8700/MKS-2700 Device Control Unit.

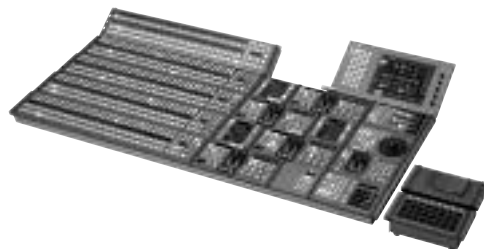
Features

- Multi-format capability: 1080i/60, 59.94, 50, 1080p/30, 29.97, 25, 24, 23.976, 720p/59.94, 480i/59.94, 576i/50
- 1-, 1.5-, or 2-Mix/Effects configurations
- Layout free CCP-8000 series control panels
- Creative M/E functionality: Four full function keyers per M/E, Multiple M/E Program output configurations
- Independent M/E functionality, 4:3 / 16:9, Crosspoint Assignments and Bus Toggle on/off, Snapshots, Keyframe and various setups
- Up to 34 inputs and 32 outputs (including 8 monitor outputs)
- Integrated device control for VTRs, Digital Disc Recorders, Digital Multi-Effects, Routing Switchers and more
- Multi-panel / Multi-processor operations
- Can store 58 frames of HD images
- The frame memory systems has eight simultaneous outputs
- Programmable Macro capability supported
- Integrated 3D DME or external DME control
- Remote maintenance and image file exchange via Ethernet network
- User programmable tally conditions and multi-level tally

Supplied Accessories

75 Ω terminator (1)
 Bracket (4)
 Support angle (2)
 Screw (+B 4 x 10) (8)
 Screw (+PSW 4 x 10) (8)
 Operation manual (1)
 Installation manual (1)

For full list of options please refer to following product pages.



MVS Switcher Control Panel



MVS-8000ASF Multi-Format Switcher Processor

Digital Video Switchers & Accessories

Specifications

General

Power requirements:

100-240 V AC +/- 10%, 50/60 Hz

Power consumption

MVS-8000ASF Switcher processor:

7.5 to 3.1 A

MVE-8000A DME processor:

2.5 to 1.0 A

MVE-9000 DME processor:

6.0 to 2.5 A

MKS-8700 Device control unit:

1.4 to 0.8A

MKS-2700 Device control unit:

5.0 to 2.1A

Dimensions (W x H x D, without projection)

MVS-8000ASF Switcher processor:

482 x 177 x 520 mm

(19 x 7 x 20 1/2 inches)

MVE-8000A DME processor:

440 x 87.5 x 520 mm

(17 3/8 x 3 1/2 x 20 1/2 inches)

Main panel

4 M/E, 32 crosspoint buttons:

1443 (with Mount Bracket) x 98 (max.) x

528 mm

(56 7/8 x 3 7/8 x 20 7/8 inches)

3 M/E, 32 crosspoint buttons:

1443 (with mounting bracket) x 98

(max.) x 528 mm

(56 7/8 x 3 7/8 x 20 7/8 inches)

2 M/E, 24 crosspoint buttons:

1291 (with mounting bracket) x 92

(max.) x 396 mm

(50 7/8 x 3 5/8 x 15 5/8 inches)

AUX BUS panel

32 crosspoint buttons:

782 (with mounting bracket) x 132 x 80

(max.) mm

(30 7/8 x 5 1/4 x 3 1/4 inches)

24 crosspoint buttons:

630 (with mounting bracket) x 132 x 80

(max.) mm

(24 7/8 x 5 1/4 x 3 1/4 inches)

Menu panel:

424 x 220 x 46 mm

(16 3/4 x 83/4 x 1 13/16 inches)

Memory card/USB adaptor:

263 (with mounting bracket) x132 x

78.5 mm

(10 3/8 x 5 1/4 x 3 1/8 inches)

Extension adaptor:

263 (with mounting bracket) x132 x

78.5 mm

(10 3/8 x 5 1/4 x 3 1/8 inches)

MKS-8700 Device control unit:

482 x 132 x 520 mm

(19 x 5 1/4 x 20 1/2 inches)

MKS-2700 Device control unit:

440 x 43.6 x 520 mm

(17 3/8 x 1 3/4 x 20 1/2 inches)

Mass

MVS-8000ASF Switcher processor:

Approx. 28 kg (61 lb 12 oz) (fully

loaded)

MVE-8000A DME processor:

Approx. 16 kg (35 lb 4 oz) (fully loaded)

Main panel (4 M/E, 32 crosspoint buttons):

Approx. 30 kg (66 lb 2 oz)

AUX BUS panel (32 crosspoint buttons):

Approx. 3.7 kg (8 lb 2 oz)

Menu panel:

Approx. 2.2 kg (4 lb 13 oz)

Extension adaptor (with fader):

Approx. 1.5 kg (3 lb 4 oz) (with module)

Memory card/USB adaptor:

Approx. 1.2 kg (2 lb 10 oz) (with module)

MKS-8700 Device control unit:

Approx. 8 kg (17 lb 10 oz)

MKS-2700 Device control unit:

Approx. 9.8 kg (21 lb 10 oz) (fully loaded)

Operation temperature:

+5 °C to +40 °C (+41°F to +104°F)

Operating humidity:

10% to 90% (non-condensing)

Serial digital video inputs

MVS-8000ASF Switcher processor

Primary Inputs:

Max. 34, BNC x 1 each,

SMPTE292M (HDTV), SMPTE259M-C

(SDTV)

Serial digital video outputs

MVS-8000ASF Switcher processor

Assignable outputs:

OUT 1 to 4, 13 to 16: BNC x 2 each

OUT 5 to 12, 17 to 24: BNC x 1 each

Dedicated switcher/DME video I/O

MVS-8000ASF Switcher processor

Integrated DME I/O:

68-pin x 4, LVDS

MVE-8000A DME processor

Digital video I/O:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2), LVDS

MVE-9000 DME processor

Digital video I/O:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2), LVDS

Reference

Switcher processor, DME processor, system control unit, device control unit

Reference input:

BNC x 2, 75 Ω with loop-through output

HDTV systems: HD tri-level sync/SDTV

analogue sync

SDTV systems: Analogue black

burst/analogue sync

Switcher processor

Reference output:

BNC x 1, 75 Ω

HDTV systems: HD tri-level sync

SDTV systems: Analogue sync

System interface

MVS-8000ASF Switcher processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Remote 1:

D-sub 9-pin, RS-422A

Remote 2:

D-sub 9-pin, RS-422A

Remote 3:

D-sub 9-pin, RS-422A

Remote 4:

D-sub 9-pin, RS-422A

Terminal:

D-sub 9-pin, RS-232C

GPI:

D-sub 25-pin, TTL level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

Extension:

BNC x 1

MVE-8000A DME processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin, TTL level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

MVE-9000 DME processor

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin x 2, dry contact or open

collector inputs x 16/

relay contact outputs x 8 /

open collector outputs x 8

CCP-8000 Series System control unit

Control LAN:

RJ-45 x 1, 100BASE-TX

Data LAN:

RJ-45 x 1, 100BASE-TX

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

GPI:

D-sub 25-pin, TTL Level inputs x 8 /

relay contact outputs x 4 /

open collector outputs x 4

Remote:

BNC x 1, S-BUS

LTC:

BNC x 1

Device:

USB type A

MKS-8700 Device control unit

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

Serial tally 1:

D-sub 9-pin x 1, RS-422A

Serial tally 2:

D-sub 9-pin x 1, RS-422A

TALLY/GPI inputs:

D-sub 37-pin x 3, TTL level inputs x 34

each

TALLY/GPI outputs *:

D-sub 37-pin, relay contact outputs

18ch,

up to 270 ch in step of 5 ch in a frame

Remote*:

D-sub 9-pin, RS-422A, various protocols,

up to 30 ports in steps of 6 ports in a

frame

MKS-2700 Device control unit

Peripheral LAN:

RJ-45 x 1, 100BASE-TX

TALLY/GPI inputs:

D-sub 37-pin x 1, TTL level inputs x 34

TALLY/GPI outputs :

D-sub 37-pin x 2, TTL level inputs x 18

each

Remote:

D-sub 9-pin x 6, RS-422A, various

protocols

* TALLY/GPI and REMOTE ports are alternatively installed. Mixed configuration of TALLY/GPI and REMOTE ports is supported.

DVS-9000 Production Switcher Processor

Compared to conventional SD switchers, the DVS-9000 Series offers greater system flexibility, a range of enhanced functions and a more compact design. The system-control structure and setup/effect data of the DVS-9000 Series switchers are compatible with the MVS-8000 Series switchers. This enables you to configure a mixed DVS-9000 Series and MVS-8000 Series setup, and also provides a smooth migration path from SD to HD operations, with minimal cost and system reconfiguration.

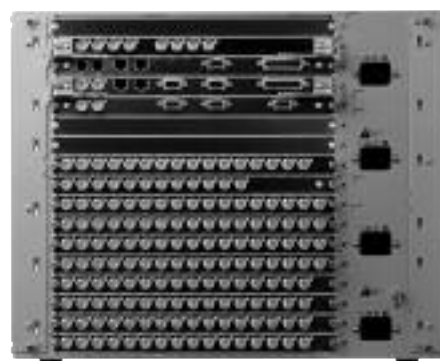
Features

- 525/625 switchable •8RU frame provides up to 80 primary inputs, 48 outputs and 8 monitor outputs
- 2-, 3- and 4-M/E configurations are available •Creative M/E functionality — Four full-function keyers per M/E, Multiple M/E program output configuration
- Independent M/E functionality — 4:3/16:9 modes, crosspoint assignment, BUS toggle on/off, Snapshots, and keyframe can be set independently for each M/E
- RGB colour-corrector option (supported in the future)
- Redundant power supply can be installed •Low power consumption — Switcher processor and built-in DME consume less than 750 W
- Sophisticated DME — BKDS-9470 DME Board Set
- Two 100base-TX network interfaces — Multi-panel and multi-processor operation, Remote maintenance and image file exchange, Set up, effect and image data transfer
- Compatible panels and peripherals with MVS-8000 Series Switchers — CCP-8000 Series and CCP-9000 Series Control Panels, MKS-8700 Device Control Unit, MKS-8080/8082 Aux Bus Remote Panel, UCP-8060 Universal Control Panel

Supplied Accessories

75 Ω terminator (1)
Bracket (4)
Support angle (2)
Screw (+B 4 x 10) (8)
Screw (+PSW 4 x 10) (8)
Operation manual (1)
Installation manual (1)

For full list of options please refer to following product pages.



Digital Video Switchers & Accessories

Specifications

General

Power requirement:
100 to 240 V AC, $\pm 10\%$ 50/60 Hz

Power consumption
DVS-9000:
8.6 to 4.2 A
CCP-8000 Series:
3.3 to 1.4 A
CCP-9000 Series:
0.9 to 0.4 A
Device control unit:
1.4 to 0.8 A

Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)

Operating humidity:
10% to 90 % (Non-condensing)

Dimensions (W x H x D)
DVS-9000:
482 x 354 x 520 mm (19 x 14 x 20 1/2 inches)
CCP-8000 Series
Main Panel
4M/E, 32-crosspoint buttons:
1443 (with mount bracket) x 98.5 x 528 mm (56 7/8 x 4 x 20 7/8 inches)
3M/E, 24-crosspoint buttons:
1291 (with mount bracket) x 98.5 x 528 mm (50 7/8 x 4 x 20 7/8 inches)
2M/E, 16-crosspoint buttons:
1139 (with mount bracket) x 98.5 x 396 mm (44 7/8 x 4 x 15 5/8 inches)
Auxiliary Bus Panel
32-crosspoint buttons:
782 (with mount bracket) x 132 x 80 mm (30 7/8 x 5 1/4 x 3 1/4 inches)
24-crosspoint buttons:
630 (with mount bracket) x 132 x 80 mm (24 7/8 x 5 1/4 x 3 1/4 inches)
16-crosspoint buttons:
478 (with mount bracket) x 132 x 80 mm (18 7/8 x 5 1/4 x 3 1/4 inches)
Menu Panel:
424 x 220 x 46 mm (16 3/4 x 8 3/4 x 1 13/16 inches)
System Control Unit:
482 x 132 x 520 mm (19 x 5 1/4 x 20 1/2 inches)
CCP-9000 Series
Main Panel
2M/E, 12-crosspoint buttons/1M/E, 12-crosspoint buttons:
478 (with mount bracket) x 208 x 442 mm (18 7/8 x 8 1/4 x 17 1/2 inches)
Menu Panel:
424 x 220 x 46 mm (16 3/4 x 8 3/4 x 1 13/16 inches)
Device Control Unit:
482 x 132 x 520 mm (19 x 5 1/4 x 20 1/2 inches)
Memory Card/USB Adaptor:
263 (with mount bracket) x 132 x 78.5 mm (10 3/8 x 5 1/4 x 3 1/8 inches)

Extension Adaptor:
263 (with mount bracket) x 132 x 78.5 mm (10 3/8 x 5 1/4 x 3 1/8 inches)

Mass
DVS-9000:
Approx. 43 kg (94 lb 13 oz)
CCP-8000 Series
Main Panel (4M/E, 32-crosspoint buttons):
30 kg (66 lb 2 oz)
Auxiliary Bus Panel (32-crosspoint buttons):
3.7 kg (8 lb 2 oz)
Menu Panel:
2.2 kg (4 lb 13 oz)
System Control Unit:
12 kg (26 lb 7 oz)
CCP-9000 Series
Main Panel
2M/E, 12-crosspoint buttons:
12.5 kg (27 lb 9 oz)
1M/E, 12-crosspoint buttons:
11.5 kg (25 lb 6 oz)
Menu Panel:
2.2 kg (4 lb 13 oz)
Device Control Unit:
18 kg (39 lb 10 oz) (Fully loaded)
Memory Card/USB Adaptor:
1.2 kg (2 lb 10 oz) (with module)
Extension Adaptor:
1.5 kg (3 lb 4 oz) (with module)

Video inputs

Primary inputs:
BNC type connector x 1 each,
Max.80
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω
Input return loss:
15 dB
Cable length:
200 m (with Belden8281, 5C-2V or equivalent coaxial cable)
External inputs (Built-in DME):
BNC type connector x 4,
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω
Input return loss:
15 dB
Cable length:
200 m (with Belden8281, 5C-2V or equivalent coaxial cable)
Reference inputs:
BNC type x 2, loop-through, analogue
black burst or analogue sync

Video outputs

OUT 1 to 48
OUT 1 to 4, 13 to 16, 25 to 28, 37 to 40:
BNC type connectors x 2 each
Out 5 to 12, 17 to 24, 29 to 36, 41 to 48:
BNC type connector x 1 each
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, C135270 Mb/s, 75 Ω
OUT 49 to 56 (Monitor outputs):
BNC type connectors x 2 each
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω
MONITOR OUT 1 to 4 (built-in DME)
MONITOR OUTPUT:
BNC type connector x 1 each
Serial digital video signal, SMPTE259M-C,
0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω
Reference output:
BNC type x 1, analogue sync

Control

Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
REMOTE 1 to 4:
D-SUB 9-pin, RS-422A
TERMINAL:
D-SUB 9-pin, RS-232C
GPI:
D-SUB 25-pin, female, relay contact
outputs x 4, open collector outputs x 4
EXTENSION:
BNC type connector x 1
Built-in DME
Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
REMOTE:
D-SUB 9-pin, RS-422A
GPI:
D-SUB 25-pin, female, relay contact
outputs x 4, open collector outputs x 4
CCP-9000 Series
Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
Peripheral LAN:
RJ-45, 100Base-TX
GPI:
D-SUB 25-pin, relay contact outputs x 4, open collector outputs x 4
Remote:
BNC type, S-BUS
Device:
USB type A
Main Panel:
D-sub 50-pin
Menu Panel:
D-sub 50-pin
Ext Panel:
D-sub 50-pin
Device Control Unit
Peripheral LAN:
RJ-45, 100Base-TX
Serial tally 1 to 2:
D-sub 9-pin, RS-422A
TALLY/GPI inputs:
D-sub 37-pin x3, TTL level inputs x 34 each,
TALLY/GPI outputs *:
D-sub 37-pin, relay contact outputs
18-ch, up to 15 ports in steps of 3
ports in a frame
REMOTE *:
D-sub 9-pin, RS-422A, various
protocols, up to 30 ports in steps of 6
ports in a frame

TALLY/GPI and REMOTE ports are alternatively installed. Mixed configuration of TALLY/GPI and REMOTE ports are supported.

DVS-9000SF Production Switcher Processor

Compared to conventional SD switchers, the DVS-9000 Series offers greater system flexibility, a range of enhanced functions and a more compact design. The system-control structure and setup/effect data of the DVS-9000 Series switchers are compatible with the MVS-8000 Series switchers. This enables you to configure a mixed DVS-9000 Series and MVS-8000 Series setup, and also provides a smooth migration path from SD to HD operations, with minimal cost and system reconfiguration.

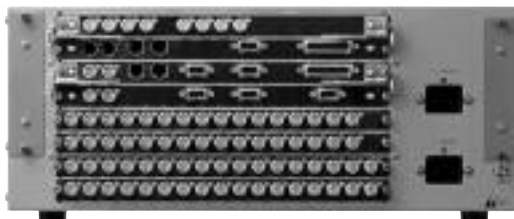
Features

- 525/625 switchable •4RU frame provides up to 34 primary inputs, 24 outputs •1- and 2-M/E configurations are available •Creative M/E functionality — Four full-function keys per M/E, Multiple M/E program output configuration •Independent M/E functionality — 4:3/16:9 modes, crosspoint assignment, BUS toggle on/off, Snapshots, and keyframe can be set independently for each M/E •RGB colour-corrector option (supported in the future) •Redundant power supply can be installed •Low power consumption — Switcher processor and built-in DME consume less than 750 W •Sophisticated DME — BKDS-9470 DME Board Set •Two 100base-TX network interfaces — Multi-panel and multi-processor operation, Remote maintenance and image file exchange, Set up, effect and image data transfer •Compatible panels and peripherals with MVS-8000 Series Switchers — CCP-8000 Series and CCP-9000 Series Control Panels, MKS-8700 Device Control Unit, MKS-8080/8082 Aux Bus Remote Panel, UCP-8060 Universal Control Panel

Supplied Accessories

75 Ω terminator (1)
 Bracket (4)
 Support angle (2)
 Screw (+B 4 x 10) (8)
 Screw (+PSW 4 x 10) (8)
 Operation manual (1)
 Installation manual (1)

For full list of options please refer to following product pages.



Digital Video Switchers & Accessories

Specifications

General

Power requirement:
100 to 240 V AC, $\pm 10\%$ 50/60 Hz

Power consumption
DVS-9000SF:
5.5 to 2.5 A

CCP-8000 Series:
3.3 to 1.4 A

CCP-9000 Series:
0.9 to 0.4 A

Device control unit:
1.4 to 0.8 A

Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)

Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)

Operating humidity:
10% to 90 % (Non-condensing)

Dimensions (W x H x D)

DVS-9000SF:
482 x 177 x 520 mm (19 x 7 x 20 1/2 inches)

CCP-8000 Series
Main Panel
4M/E, 32-crosspoint buttons:
1443 (with mount bracket) x
98.5 x 528 mm (56 7/8 x 4 x 20 7/8 inches)

3M/E, 24-crosspoint buttons:
1291 (with mount bracket) x
98.5 x 528 mm (50 7/8 x 4 x 20 7/8 inches)

2M/E, 16-crosspoint buttons:
1139 (with mount bracket) x
98.5 x 396 mm (44 7/8 x 4 x 15 5/8 inches)

Auxiliary Bus Panel
32-crosspoint buttons:
782 (with mount bracket) x 132 x 80 mm (30 7/8 x 5 1/4 x 3 1/4 inches)

24-crosspoint buttons:
630 (with mount bracket) x 132 x 80 mm (24 7/8 x 5 1/4 x 3 1/4 inches)

16-crosspoint buttons:
478 (with mount bracket) x 132 x 80 mm (18 7/8 x 5 1/4 x 3 1/4 inches)

Menu Panel:
424 x 220 x 46 mm (16 3/4 x 8 3/4 x 1 13/16 inches)

System Control Unit:
482 x 132 x 520 mm (19 x 5 1/4 x 20 1/2 inches)

CCP-9000 Series
Main Panel
2M/E, 12-crosspoint buttons/1M/E, 12-crosspoint buttons:
478 (with mount bracket) x 208 x 442 mm (18 7/8 x 8 1/4 x 17 1/2 inches)

Menu Panel:
424 x 220 x 46 mm (16 3/4 x 8 3/4 x 1 13/16 inches)

Device Control Unit:
482 x 132 x 520 mm (19 x 5 1/4 x 20 1/2 inches)

Memory Card/USB Adaptor:
263 (with mount bracket) x 132 x 78.5 mm (10 3/8 x 5 1/4 x 3 1/8 inches)

Extension Adaptor:
263 (with mount bracket) x 132 x 78.5 mm (10 3/8 x 5 1/4 x 3 1/8 inches)

Mass

DVS-9000SF:
Approx. 25 kg (55 lb 8 oz)

CCP-8000 Series
Main Panel (4M/E, 32-crosspoint buttons):
30 kg (66 lb 2 oz)

Auxiliary Bus Panel (32-crosspoint buttons):
3.7 kg (8 lb 2 oz)

Menu Panel:
2.2 kg (4 lb 13 oz)

System Control Unit:
12 kg (26 lb 7 oz)

CCP-9000 Series
Main Panel
2M/E, 12-crosspoint buttons:
12.5 kg (27 lb 9 oz)

1M/E, 12-crosspoint buttons:
11.5 kg (25 lb 6 oz)

Menu Panel:
2.2 kg (4 lb 13 oz)

Device Control Unit:
18 kg (39 lb 10 oz) (Fully loaded)

Memory Card/USB Adaptor:
1.2 kg (2 lb 10 oz) (with module)

Extension Adaptor:
1.5 kg (3 lb 4 oz) (with module)

Video inputs

Primary inputs:
BNC type connector x 1 each,
Max.34
Serial digital video signal,
SMPTE259M-C, 0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω

Input return loss:
15 dB

Cable length:
200 m (with Belden8281, 5C-2V or equivalent coaxial cable)

External inputs (Built-in DME):
BNC type connector x 4,
Serial digital video signal,
SMPTE259M-C, 0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω

Input return loss:
15 dB

Cable length:
200 m (with Belden8281, 5C-2V or equivalent coaxial cable)

Reference inputs:
BNC type x 2, loop-through, analogue black burst or analogue sync

Video outputs

OUT 1 to 24
OUT 1 to 4, 13 to 16:
BNC type connectors x 2 each

Out 5 to 12, 17 to 24:
BNC type connector x 1 each

Serial digital video signal,
SMPTE259M-C, 0.8 Vp-p $\pm 10\%$, C135270 Mb/s, 75 Ω

MONITOR OUT 1 to 4 (built-in DME MONITOR OUTPUT):
BNC type connector x 1 each

Serial digital video signal,
SMPTE259M-C, 0.8 Vp-p $\pm 10\%$, 270 Mb/s, 75 Ω

Reference output:
BNC type x 1, analogue sync

Control

Control LAN:
RJ-45, 100Base-TX

Data LAN:
RJ-45, 100Base-TX

REMOTE 1 to 4:
D-SUB 9-pin, RS-422A

TERMINAL:
D-SUB 9-pin, RS-232C

GPI:
D-SUB 25-pin, female, relay contact outputs x 4, open collector outputs x 4

EXTENSION:
BNC type connector x 1

Built-in DME
Control LAN:
RJ-45, 100Base-TX

Data LAN:
RJ-45, 100Base-TX

REMOTE:
D-SUB 9-pin, RS-422A

GPI:
D-SUB 25-pin, female, relay contact outputs x 4, open collector outputs x 4

CCP-9000 Series
Control LAN:
RJ-45, 100Base-TX

Data LAN:
RJ-45, 100Base-TX

Peripheral LAN:
RJ-45, 100Base-TX

GPI:
D-SUB 25-pin, relay contact outputs x 4, open collector outputs x 4

Remote:
BNC type, S-BUS

Device:
USB type A

Main Panel:
D-sub 50-pin

Menu Panel:
D-sub 50-pin

Ext Panel:
D-sub 50-pin

Device Control Unit
Peripheral LAN:
RJ-45, 100Base-TX

Serial tally 1 to 2:
D-sub 9-pin, RS-422A

TALLY/GPI inputs:
D-sub 37-pin x3, TTL level inputs x 34 each,

TALLY/GPI outputs *:
D-sub 37-pin, relay contact outputs 18-ch, up to 15 ports in steps of 3 ports in a frame

REMOTE *:
D-sub 9-pin, RS-422A, various protocols, up to 30 ports in steps of 6 ports in a frame

TALLY/GPI and REMOTE ports are alternatively installed. Mixed configuration of TALLY/GPI and REMOTE ports are possible.

BKDS-9160 24-Output Board

The BKDS-9160 adds 24 outputs to the 24 outputs standard on the DVS-9000, making the total number of outputs 48.

Applicable Models

DVS-9000 Production Switcher Processor

BKDS-9161 8 Monitor Output Board

The BKDS-9161 is an optional SD SDI output board. With this option fitted, the DVS-9000 switcher processor offers eight re-clocked outputs to which the primary input signals can be routed with minimum delay. Those outputs are useful to monitor every primary input signal or to re-entry the primary input signals through the external processors such as colour correctors.

NOTE: Unlike the BKDS-9160, those monitor outputs cannot handle the processed signals.

Applicable Models

DVS-9000 Production Switcher Processor

BKDS-9162 12-Output Board

The BKDS-9162 adds 12 outputs to the 12 outputs standard on the DVS-9000SF, making the total number of outputs 24.

Applicable Models

DVS-9000SF Production Switcher Processor

BKDS-9210 Mix/Effect Board

The BKDS-9210 is an optional mix/effects board set. With this option installed, the DVS-9000 is expandable from two to four M/Es, and the DVS-9000SF is expandable from one to two M/Es

Applicable Models

DVS-9000 Production Switcher Processor

DVS-9000SF Production Switcher Processor

BKDS-9470 DME Board Set

By installing the BKDS-9470, the DVS-9000 Series Switcher processors offer four channels of high-quality DME.

Features

- 4 DME channels
- Video, Key and SDI external video inputs per channel
- External video input for use as the background or border/trail source
- The four SDI monitor outputs allow monitoring of the video with graphic, the video without graphic, or the key
- Y/C/K 10-bit processing
- High-performance pixel-based anti-alias filter
- 8 x 8 multi-point interpolation
- Frame base processing
- 2D, 3D and non-linear effects
- Digital SKETCH, Digital SPARKLE, Colour Corrector and up to four channels of Intersect Combine
- Powerful lighting effects

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor

Optional Accessories

BZS-9471 Texture Lighting Software

BZS-9471 Texture Lighting Software

Texture Lighting Software for the Sony DME board set BKDS-9470

Features

The BZS-9471 is Texture Lighting Software for use with the BKDS-9470 DME board installed in the DVS-9000 Production switcher processor. Its texture lighting function enables you to map a texture pattern onto a DME effect using the spotlight function. The Real Lighting Function can add more realistic lighting to several Non-linear effect patterns. Up to four light sources are available per DME channel. With its Test Sphere Function, the position and brightness of light sources can be confirmed with ease.

*V3.0 or later software is required in the BKDS-9470 to install the BZS-9471 Texture Lighting Software.

Applicable Models

BKDS-9470 DME Board Set

MKS-8110M 17-Input Board (HD/SD Multi-format)

The MKS-8110M is an optional HD SDI or SD SDI input board. With this option fitted, the MVS-8000 Series Switcher processor provides 17 HD SDI or SD SDI inputs.

Features

- The MVS-8000 switcher processor can expand up to 80 inputs with the MKS-8110M and MKS-8111M
- The MVS-8000SF switcher processor can expand up to 34 inputs

Applicable Models

MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

MKS-8110SD 17-Input Board (SD)

The MKS-8110SD is an optional SD SDI input board. With this option fitted, the MVS-8000/DVS-9000 Series switcher processor provides 17 SD SDI inputs

Features

- The MVS-8000 and DVS-9000 switcher processor can expand up to 68 inputs
- The MVS-8000SF and DVS-9000 SF switcher processor can expand up to 34 input

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor

MKS-8111M Additional 12-Input Board (HD/SD Multi-format)

MKS-8111M is an optional board that provides 12 HD SDI or SD SDI inputs. The HD SDI or SD SDI inputs of MVS-8000 and DVS-9000 Switcher processor can be expanded up to 80 in combination use of four MKS-8110M boards and a MKS-8111M board.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MKS-8111SD Additional 12-Input Board (SD)

MKS-8111SD is an optional board that provides 12 SD SDI inputs. The SD SDI inputs of MVS-8000 and DVS-9000 switcher processor can be expanded up to 80 in combination use of four MKS-8110SD boards and a MKS-8111SD board.

Applicable Models

DVS-9000 Production Switcher Processor

MKS-8160A 24-Output Board Set (HD/SD Multi-format)

The MKS-8160A is an optional HD SDI/SD SDI multi-format output board. With this option installed, the MVS-8000A Switcher processor offers 24 HD SDI or SD SDI outputs.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MKS-8161M Monitor Output Board

The MKS-8161M is an optional HD SDI/SD SDI multi-format output board. With this option fitted, the MVS-8000 Switcher processor offers eight re-clocked outputs to which the primary input signals can be routed with minimum delay. Those outputs are useful to monitor every primary input signal or to re-entry the primary input signals through the external processors such as colour correctors.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MKS-8162A 12-Output Board

The MKS-8162A adds 12 outputs to the 12 outputs standard on the MVS-8000ASF, making the total outputs 24.

Applicable Models

MVS-8000ASF Multi-Format Switcher Processor

MKS-8170M DME Interface Board (HD/SD Multi-format)

Features

A DME interface board for multi-format applications for MVS-8000 Series.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MVS-8000ASF Multi-Format Switcher Processor

MKS-8210A Mix/Effect Board

The MKS-8210A mix/effects board is an optional board for the MVS-8000A and MVS-8000ASF production switcher systems. By installing the MKS-8210A, the MVS-8000A Switcher processor can be extended from two to four M/Es and the MVS-8000ASF Switcher processor can be extended from one to two M/Es.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MVS-8000ASF Multi-Format Switcher Processor

MKS-8440A Frame Memory Board

The MKS-8440A frame memory board is an optional board for the MVS-8000A and the MVS-8000ASF production switcher systems. By installing the MKS-8440A, the MVS-8000A Series can store 58 frames of HD images. Images can either be stored separately or paired for video/key operation.

Applicable Models

MVS-8000A Multi-Format Switcher Processor

MVS-8000ASF Multi-Format Switcher Processor

BZS-8250 Simple p/p software

Additional simple PGM/PST function for the MVS-8000A Series switcher system

The BZS-8250 software allows the addition of a simple PGM/PST function to the MVS-8000A Series Switcher system to configure it as a 1.5/2.5/3.5 M/E system.

It can also be used to add two DSKs but without the simple PGM/PST function.

- Offers a simple PGM/PST function; BKGD A/B buses, two simple DSK and FTB
- Provides transition type; CUT, MIX, WIPE, SUPER MIX, NAM and PRESET COLOUR MIX
- Provides Transition Preview function
- DSK supports Luminance Key and Linear Key
- DSK provides modifiers such as CLEAN MODE, KEY EDGE POSITION, INVERT, SHOW KEY, AUTO/SELF/SPLIT mode
- FTB (FADE TO BLACK) function
- Memory system for WIPE SNAPSHOT, KEY SNAPSHOT, SNAPSHOT, EFFECT
- Controlled from PGM/PST control area on the CCP-8000/9000 Series control panel
- When the BZS-8250 is used to add DSKs (DSK Mode), the additional DSKs are operated from MKS-8034ADK or MKS-8032A

Applicable Models

MVS-8000SF Multi-Format Switcher Processor

MVS-8000 Multi-Format Switcher Processor

BZS-9250 Simple p/p software

Additional simple PGM/PST function for the DVS-9000 Series switcher system.

The BZS-9250 software allows the addition of a simple PGM/PST function to the DVS-9000 Series Switcher system to configure it as a 1.5/2.5/3.5 M/E system.

It can also be used to add two DSKs but without the simple PGM/PST function.

- Offers a simple PGM/PST function; BKGD A/B buses, two simple DSK and FTB
- Provides transition type; CUT, MIX, WIPE, SUPER MIX, NAM and PRESET COLOUR MIX
- Provides Transition Preview function
- DSK supports Luminance Key and Linear Key
- DSK provides modifiers such as CLEAN MODE, KEY EDGE POSITION, INVERT, SHOW KEY, AUTO/SELF/SPLIT mode
- FTB (FADE TO BLACK) function
- Memory system for WIPE SNAPSHOT, KEY SNAPSHOT, SNAPSHOT, EFFECT
- Controlled from PGM/PST control area on the CCP-8000/9000 Series control panel
- When the BZS-9250 is used to add DSKs (DSK Mode), the additional DSKs are operated from MKS-8034ADK or MKS-8032A

Applicable Models

DVS-9000SF Production Switcher Processor

DVS-9000 Production Switcher Processor

BZPS-8000 System Management Software

The BZPS-8000 running on a PC enables integrated management of all Sony live production products configured around and networked to the MVS/DVS Series Switchers. A software package for client and server PC.

Features

- System data backup/restore — Setups, effects, images, etc. for MVS/DVS, PFV-SP and Router can be backup and restored at a time. Multiple system data can be handled easily per On-air program, per Event, per Operating clue, etc.
- File server — Individual file transfer control. File accessing from MVS/DVS panel.
- Status Monitoring/SNMP IF — System status (detected error per equipment) can be displayed on status menu. Convert MVS/DVS status to SNMP for Maintenance Manager.
- Server and Client — Server function is fundamental part: Gateway, File Server, SNMP IF, etc. Client function is user interface to operate System manager functions
- Launcher — There will be some plug-in application software available: MVS/DVS Setup, PFV-SP Setup, Router Setup, etc.

Applicable Models

DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

The required PC specifications for System Manager Server and Client as follows

Server PC

Model:

Dell PowerEdge 350

CPU:

Celeron® 850 MHz or greater

HDD:

40 GB or more

Memory:

512 MB or more

OS:

Red Hat Linux 7.2

* At the initial setup of PC, VGA Display and PS/2 Keyboard will be required.

However, these are no longer required after the initial setup. RS-232C remote access from the other PC can update the software.

* Dell PC Model is current and may be replaced with successor sooner or later. So, we will keep you updated if some changes happen.

Client PC

CPU:

1 GHz or faster

Memory:

256 MB or more

Ethernet:

100Base-Tx

OS:

Windows 2000 Professional

* The target schedule to support Windows XP will be informed later.

BZPS-8001 Switcher Setup Software

The BZPS-8001 for a client PC of the System Manager allows remote setup and control of MVS/DVS Series switchers. A software package for online software and offline software for a client PC.

Features

- Online — Setup MVS/DVS panel menu can be operated on PC remotely (online).
- Offline Setup — MVS/DVS setup can be created on PC anytime/anywhere (offline). Source assignment, name settings, etc. on Windows circumstance.
- Remote Diagnosis — Remotely control MVS/DVS diagnosis.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

HK-PSU04 Power supply unit

Applicable Models

MVE-9000 Multi-format DME Processor
DVS-9000SF Production Switcher Processor
DVS-9000 Production Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000Multi-Format Switcher Processor

Supplied Accessories

Installation Guide

Specifications

General

Power requirements

100 to 240 V AC \pm 10%, 50/60 Hz

Output power

12 V DC \pm 0.5V

Power consumption

10 to 5 A

Secondary power supply

Max. 60 A

Dimensions (W x H x D)

94 x 83 x 396 mm (3 $\frac{3}{4}$ x 3 $\frac{3}{8}$ x 15 $\frac{5}{8}$ inches)

Mass

Approx. 3 kg (6 lb 9 oz)

MVE-8000A Multi-Format DME Processor

The MVE-8000A is a multi-format DME processor for the MVS-8000A Series Multi-Format Production Switcher System with its frame size only 2 RU. The MVE-8000A provides a wide variety of effects such as 2D/3D and linear/non-linear transforms in both HDTV and SDTV video formats, which can be easily switched from switcher control panel without swapping the boards. The MVE-8000A is integrated to the MVS-8000A Series switcher processor via dedicated cables without consuming the SDI inputs and outputs on the switcher processor. In conjunction with the MVE-8000A, the MVS-8000A Series system allows DME- Wipes, Processed Key, and a wide variety of attractive effects, which can be controlled from the control panel as if they were a part of the switcher functions.



Applicable Models

MVS-8000A Multi-Format Switcher Processor

MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operation Manual (1)

Installation Manual (1)

Switcher Video Interface Cable (3 m) (2)

Optional Accessories

MKE-8021A Input/Output Board (SDI)

MKE-8020A MVS Interface Board

MKE-8040A Effects Board (MVE-8000A)

HK-PSU02 Power Supply Unit

Specifications

General

Power requirements:

100 - 240 V \pm 10%, 50/60 Hz

Power consumption:

2.5 to 1.0 A

Dimensions (W/H/D):

440 mm x 87.5 mm x 520 mm (17 3/8 x 3

1/2 x 20 1/2 inches)

(without projection)

Mass:

16 kg (35 lb 4 oz) (fully loaded)

Operation Temperature:

+ 5 °C to + 40 °C (+ 41 °F to + 104 °F)

Operating humidity:

10% to 90% (non-condensing)

Inputs/outputs

MKE-8020A:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2), LVDS

MKE-8021A:

Video inputs-Video/Key: BNC x 8, SDI

Video outputs-Video/Key: BNC x 8, SDI

Monitor outputs: BNC x 4, SDI

Reference:

BNC x 2, 75 Ω with loop-through output

Analogue black burst or HD tri-level sync

System interface

Control LAN:

RJ-45 x 1, 100BASE-TX

DATA LAN:

RJ-45 x 1, 100BASE-TX

Editor:

D-sub 9-pin x 4, RS-422A

GPI:

D-sub 25-pin, TTL level inputs x 8,

relay contact outputs x 4, open collector

outputs x 4

HK-PSU02 Power Supply Unit

Redundant power supply unit for the MFS-2000 Multi Format Switcher Processor and MKS-8010A System Control Unit

Applicable Models

MFS-2000 Multi-Format Switcher Processor
MKS-8010A System Control Unit
MVE-8000A Multi-Format DME Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Installation Guide (1) (1)

Specifications

General

Operating temperature:
5 to 40 °C (41 to 104 °F)
Storage temperature:
- 20 to 60 °C (- 4 to 140 °F)
Operating humidity:
10% to 90% (nocondensation)

MKE-8020A MVS Interface Board

The MKE-8020A is an optional board for the MVE-8000A Multi Format DME Processor. The MVE-8000A requires the MKE-8020A as an interface board to the MVS-8000A series production switcher system.

Applicable Models

MVE-8000A Multi-Format DME Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operation Manual (1)
Dedicated Interface Cable (2)
Installation Guide (1)

Specifications

Video inputs/Video outputs
MVS interface:
MDR 68-pin x 2 (inputs/outputs:
2 CH x 2), LVDS

MKE-8021A Input/Output Board (SDI)

The MKE-8021A is an optional board for the MVE-8000A Multi Format DME Processor. The MKE-8021A has input and output connectors for SDI signals and BNC connectors for monitoring.

Applicable Models

MVE-8000A Multi-Format DME Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operation Manual (1)
Installation Guide (1)

Specifications

Video inputs
Video/Key: BNC connector x 8, SDI
Video outputs
Video/Key: BNC connector x 8, SDI
Monitor outputs:
BNC connector x 4, SDI

MKE-8040A Effects Board (MVE-8000A)

The MKE-8040A Effects Board provides excellent 2-channel effects to the MVE-8000A Multi Format DME Processor. The MKE-8040A provides the following stunning effects: Beveled Edge, Glow, Digital SKETCH., Metal, and Mask. Its multi-format capabilities make it suited to both content creation in high-end production and post-production. The MKE-8040A comprises a single board.

Applicable Models

MVE-8000A Multi-Format DME Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

MVE-9000 Multi-format DME Processor

The MVE-9000 provides high picture quality and a rich set of features for the creation of stunning special effects in live environments and post-production.

Features

- High-quality DME
- HD/SD multi-format capability
- HDTV: 1080i/50, 59.94, 60, 1080p/23.976, 24, 25, 29.97, 30, 720p/59.94
- SDTV: 480i/59.94, 576i/50
- A variety of effects
- 3D Linear/Nonlinear, Sparkle, Input Freeze, Defocus, Key Border, Beveled Edge, Glow, Sketch, Metal, Mask, Light, Shadow, Trail and more
- Up to four channels of Combine with Intersect and Dim/Fade
- Effect data compatible with the MVE-8000
- Y/C/K 10-bit processing
- Field/Frame-based processing
- High-performance pixel-based anti-alias filter
- High-quality multi-point interpolation
- Up to four channels can be configured on a channel basis
- One of the following video interface boards can be installed — The MKE-9021M for standalone operations or MKE-9020M for dedicated connection to the MVS Series switcher
- 4U high, less than 15 kg in weight, and less than 500 W consumed when fully loaded with its option boards
- Redundant power supply HK-PSU04 can be installed
- Four RS-422 interfaces for control from external editor
- Each channel can be independently controlled
- GPI and Tally interface
- 100Base-TX network interfaces allow the transfer of files (image, effect, setup, etc.) between equipment connected to the MVS Data LAN, and real time control via the MVS Control LAN



Applicable Models

MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operation Manual (1)
Installation Manual (1)
75 Ω Terminator (1)
Mounting Bracket (1)
Support Angle (1)
Screw (1)

Optional Accessories

BZDM-9050 Texture Lighting Software

Optional Boards

MKE-9020M MVS Interface Board Set for the MVE-9000
MKE-9021M Input/Output Board Set for the MVE-9000
MKE-9040M Advanced Effects Board for the MVE-9000
HK-PSU04 Power Supply Unit

Specifications

General

Power requirement:
100 V to 240 V \pm 10% 50/60 Hz
Power consumption:
500 VA
Operating temperature:
5 °C to 40°C (41 °F to 104 °F)
Storage temperature:
-20 °C to + 60 °C (-4 °F to + 140 °F)
Operating humidity:
10% to 90% RH

Dimensions (W x H x D):

482 x 194 x 520 mm (19 x 7 3/4 x 20 1/2 inches)

Mass:

Approx. 20 kg (44 lb 1 oz)

Inputs

Video inputs (MKE-9021M)

SDI

Video/Key:

BNC-type connectors x 8

Ext Video IN:

BNC-type connectors x 4

Reference:

BNC type connectors x 2, 75 Ω with

loop-through output

Analogue black burst or HD tri-level sync

Outputs

Video outputs (MKS-9021M)

SDI

Video/Key:

BNC-type connectors x 8

Monitor Out:

BNC-type connectors x 4

Video inputs/Video outputs (MKE-9020M)

MVS interface:

MDR 68-pin x 2 (inputs/outputs: 2 CH x 2),

LVDS

Control signals

Control LAN:

RJ-45 x 1, 100Base-TX

Data LAN:

RJ-45 x 1, 100Base-TX

Remote:

D-SUB 9-pin x 4, RS-422

GPI:

D-SUB 25-pin x 2, dry contact or open collector inputs x 16, relay contact outputs x 8, open collector outputs x 8

MKE-9020M MVS Interface Board Set for the MVE-9000

- Provides dedicated Video and Key I/O, SDI External video inputs per channel, and 4 SDI monitor outputs
- Provides a 68-pin multi-connector cables to connect to the MVS-8000 Series switcher

Applicable Models

MVS-8000ASF Multi-Format Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVE-9000 Multi-format DME Processor

Supplied Accessories

Operation and Installation Guide

Specifications

Video inputs/Video outputs

MVS interface

MDR 68-pin x 2

(inputs/outputs: 2 CH x 2), LVDS

MKE-9021M Input/Output Board Set for the MVE-9000

- Provides SDI interfaces for stand alone operations
- Provides Video, Key, and External video inputs per channel, Video and Key outputs per channel and 4 monitor outputs
- Provides SDI connectors to connect to the MVS-8000 Series switcher

Applicable Models

MVS-8000ASF Multi-Format Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVE-9000 Multi-format DME Processor

Supplied Accessories

Operation and Installation Guide

Specifications

Video inputs/Video outputs

Video/Key

BNC-type connectors x 8, SDI

MKE-9040M Advanced Effects Board for the MVE-9000

- Provides one channel of DME effects; 2D/3D Transform including non-linear effects, sketch, beveled edge and more
- Up to four MKE-9040M boards can be installed into an MVE-9000 unit on a channel basis

Applicable Models

MVS-8000ASF Multi-Format Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVE-9000 Multi-format DME Processor

Supplied Accessories

Operation and Installation Guide

BZDM-9050 Texture Lighting Software

Texture Lighting Software for the Sony Multi-format DME processor MVE-9000

Features

The BZDM-9050 is Texture Lighting Software for use with the MVE-9000 Multi-format DME processor. Its texture lighting function enables you to map a texture pattern onto a DME effect using the spotlight function. The Real Lighting Function can add more realistic lighting to several Non-linear effect patterns. Up to four light sources are available per DME channel. With its Test Sphere Function, the position and brightness of light sources can be confirmed with ease.

*V3.0 or later software is required in the MVE-9000 to install the BZDM-9050 Texture Lighting Software.

Applicable Models

MVE-9000 Multi-format DME Processor

MKS-8700 Device Control Unit

The MKS-8700 is a device control unit for MVS-8000 Series in conjunction with MKS-8701 Tally/GPI Board and/or MKS-8702 Serial Interface Board. Up to five boards can be installed. One MKS-8700 can provide Tally/GPI port expansion in 3-port increments up to 15 ports (18 channels per one port) in combination with the MKS-8701. It can also provide RS-422A port expansion in 6-port increments up to 30 ports in combination with the MKS-8702.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operation Manual (1)
Installation Manual (1)
75 Ω terminator (1)
Redundant power supply unit (1)

Optional Boards

MKS-8701 Tally/GPI Output Board
MKS-8702 Serial Interface Board

Specifications

General

Power:

Power Requirement
100-240 V AC +/- 10% 50/60 Hz
Power Consumption
max. 250 W

Dimensions (W x H x D, without projection):

482 mm x 132 mm x 520 mm
(19 x 5 1/4 x 20 1/2 inches)

Mass:

18 kg (39 lb 10 oz) (Fully Loaded)

Operation Temperature:

+5 °C to +40 °C (+41°F to +104°F)

Relative Humidity:

Up to 90% (Non-Condensing)

Reference

Reference Input:

BNC connector x 2, Loop-through
HD Tri-level Sync (HDTV only) or
Analogue Black Burst or Sync

System Interface

Peripheral LAN :

RJ-45, 100BASE-TX

Serial Tally 1:

D-sub 9-pin, RS-422A

Serial Tally 2:

D-sub 9-pin, RS-422A

TALLY/GPI * :

D-sub 37-pin, relay contact outputs 18-ch
up to 15 ports in steps of 3 ports in a
frame

REMOTE :

D-sub 9-pin, RS-422A, various protocols,
up to 30 ports in steps of 6 ports in a
frame

TALLY/GPI and REMOTE ports are alternatively
installed. Mixed configuration of TALLY/GPI and
REMOTE ports are possible.

MKS-8701 Tally/GPI Output Board

The MKS-8701 is a tally/GPI output board for MVS-8000 Series in conjunction with MKS-8700 Device Control Unit and/or MKS-8702 Serial Interface Board. Up to five boards can be installed. One MKS-8700 can provide Tally/GPI port expansion in 3-port increments up to 15 ports (18 channels per one port) in combination with the MKS-8701. It can also provide RS-422A port expansion in 6-port increments up to 30 ports in combination with the MKS-8702.

Applicable Models
MKS-8700 Device Control Unit

MKS-8702 Serial Interface Board

The MKS-8702 is a serial interface board for MVS-8000 Series in conjunction with MKS-8700 Device Control Unit and/or MKS-8701 Tally/GPI Interface Board. Up to five boards can be installed. One MKS-8700 can provide RS-422A port expansion in 6-port increments up to 30 ports in combination with the MKS-8702. It can also provide Tally/GPI port expansion in 3-port increments up to 15 ports (18 channels per one port) in combination with the MKS-8701.

Applicable Models
MKS-8700 Device Control Unit

MKS-2700 Device Control Unit

The MKS-2700 Device Control Unit is a compact Device Control Unit for the MVS-8000A series, the DVS-9000 series, and the MFS-2000 production switcher system with its size 1RU. Redundant power supply is supported by using the optional HK-PSU01 Power Supply Unit. The MKS-2700 is suitable for small-scale systems with affordable price.



Applicable Models
MFS-2000 Multi-Format Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Optional Accessories
HK-PSU01 Power Supply Unit

Specifications

General

- Power consumption:
0.7 to 0.5 A
- Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
- Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)
- Operation humidity:
10% to 90% RH
- Dimensions (W x H x D):
440 x 43.6 x 520 mm (17 3/8 x 1 3/4 x 20 1/2 inches)
- Mass:
9.8 kg (21 lb 10 oz)

Control signals

- Peripheral LAN:
RJ-45 x 1, 100BASE-TX
- TALLY/GPI inputs:
D-sub 37-pin x 1, TTL level inputs x 34
- TALLY/GPI outputs:
D-sub 37-pin x 2, TTL level inputs x 18 each
- REMOTE:
D-sub 9-pin x 6, RS-422A, various protocols

MKS-8010A System Control Unit

The MKS-8010A System Control Unit works as the central control over the CCP-8000Series Center Control Panel. The system control unit provides control functions for the center control panel, supplies power to various panel modules, and stores the whole setup data, effects data, snapshot data and still images.



Features

- The MKS-8010A is a compact system control unit with its size compact 1RU
- Redundant power supply is supported by using the optional HK-PSU02 Power Supply Unit

Optional Accessories

HK-PSU02 Power Supply Unit
SWC-5002 Control Panel Cable
SWC-5005 Control Panel Cable
SWC-5010 Control Panel Cable
MKS-8075 Extension Adaptor
MKS-8076 Memory Card/USB Adaptor

Mass:
11.5 kg (25 lb 6 oz)
Operating temperature:
5 to 40 °C (41to +104°F)
Operating humidity:
10% to 90% (Non-condensing)

Inputs

Reference Input:
BNC connector x 2, Loop-through
HD Tri-level Sync (HDTV only) or
Analogue Black Burst or Sync

System interface

Control LAN:
RJ-45, 100BASE-TX
Data LAN:
RJ-45, 100BASE-TX
Peripheral LAN:
RJ-45, 100BASE-TX

GPI:
D-sub 25-pin, TTL level inputs x 8 /
relay contact outputs x 4 /
open collector outputs x 4
Remote:
BNC connector x 1, S-BUS
LTC:
BNC connector x 1
Device:
USB Type A

Specifications

General

Power requirements:
100 to 240 V AC +/- 10%, 50/60 Hz
Power consumption:
Max. 250 W (incl. Center Control Panel,
Aux Panel and Menu Panel)
Dimensions (W x H x D, without projection):
440 x 43.6 x 520 mm (17 3/8 x 1 3/4 x
20 1/2 inches)

MKS-8011A Menu Panel

A menu panel is used to select different types of effects, such as transitions, keys, wipes, DME (digital multi effect) functions, etc. and to set up the operational mode and the system setting of peripherals. A 10.4-inch, touch-sensitive colour LCD screen is adopted for the menu panel to give intuitive and speedy operation.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher
Processor

Specifications

General

Dimensions (W x H):
424 x 220 mm (5 RU) (16 3/4 x 8 3/4
inches)

MKS-8013A 32 Aux Bus Module

The auxiliary module is used to select sources for monitoring and recording, and also to select material to the frame memory and DME. By changing their operational mode, these buses can then select the destinations and sources of a routing switcher. Each auxiliary bus has two crosspoint button rows, the allocation of which can be set independently. For instance, the DME video can be on the upper row and the DME key on the lower row, alternatively both Shifted and Non-shifted sources can be displayed at the same time.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
750 x 132 mm (3 RU) (29 5/8 x 5 1/4 inches)

MKS-8014A 24 Aux Bus Module

The auxiliary bus module is used to select sources for monitoring and recording, and also to select material to the frame memory and DME. By changing their operational mode, these buses can then select the destinations and sources of a routing switcher. Each auxiliary bus has two crosspoint button rows, the allocation of which can be set independently. For instance, the DME video can be on the upper row and the DME key on the lower row, alternatively both Shifted and Non-shifted sources can be displayed at the same time.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

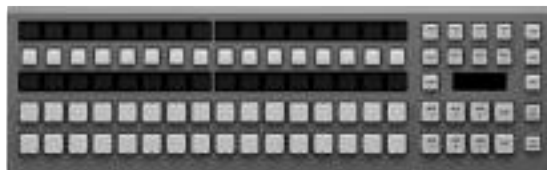
Specifications

General

Dimensions (W x H):
598 x 132 mm (3 RU) (23 1/2 x 5 1/4 inches)

MKS-8015A 16 Aux Bus Module

The auxiliary bus module is used to select sources for monitoring and recording, and also to select material to the frame memory and DME. By changing their operational mode, these buses can then select the destinations and sources of a routing switcher. Each auxiliary bus has two crosspoint button rows, the allocation of which can be set independently. For instance, the DME video can be on the upper row and the DME key on the lower row, alternatively both Shifted and Non-shifted sources can be displayed at the same time.



Applicable Models

DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
 444 x 132 mm (3RU) (17 1/2 x 5 1/4 inches)

MKS-8017A 32 Crosspoint Module

The Crosspoint module is used to select background and key sources for each M/E or PGM/PST bank. These modules provide two rows of key source selection buttons, plus a source name display row and two background source selection rows. On the key source selection rows, Keys 1/3 and Keys 2/4 can be interchanged. On the Background rows, sources can also be selected from the Utility 1/2 busses. Three-colour, backlit LCD displays are used on the source name display row. These enable text and graphics to be displayed in any one of three colours for easy user identification of source type.



Applicable Models

DVS-9000 Production Switcher Processor
 DVS-9000SF Production Switcher Processor
 MVS-8000A Multi-Format Switcher Processor
 MVS-8000ASF Multi-Format Switcher Processor

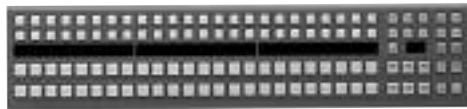
Specifications

General

Dimensions (W x H):
 750 x 132 mm (3 RU) (29 5/8 x 5 1/4 inches)

MKS-8018A 24 Crosspoint Module

The crosspoint module is used to select background and key sources for each M/E or PGM/PST bank. These modules provide two rows of key source selection buttons, plus a source name display row and two background source selection rows. On the key source selection rows, Keys 1/3 and Keys 2/4 can be interchanged. On the Background rows, sources can also be selected from the Utility 1/2 bus. Three-colour, backlit LCD displays are used on the source name display row. These enable text and graphics to be displayed in any one of three colours for easy user identification of source type.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

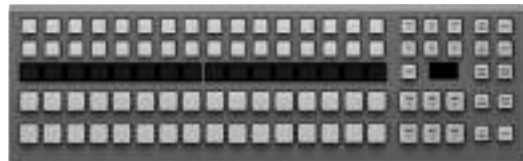
Specifications

General

Dimensions (W x H):
598 x 132 mm (3 RU) (23 1/2 x 5 1/4 inches)

MKS-8019A 16 Crosspoint Module

The crosspoint module is used to select background and key sources for each M/E or PGM/PST bank. These modules provide two rows of key source selection buttons, plus a source name display row and two background source selection rows. On the key source selection rows, Keys 1/3 and Keys 2/4 can be interchanged. On the Background rows, sources can also be selected from the Utility 1/2 bus. Three-colour, backlit LCD displays are used on the source name display row. These enable text and graphics to be displayed in any one of three colours for easy user identification of source type.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
444 x 132 mm (3 RU) (17 1/2 x 5 1/4 inches)

MKS-8020A Standard Transition Module

The standard transition module is used to cut or transition images on each M/E or PGM/PST bank. It consists of a standard transition area equipped with fader lever and four additional dedicated key transition areas, any of which can be used independently for transition selection and execution. This standard transition area allows priority setting of all four keys with transition preview, while the dedicated key transition area provides buttons for key snapshot store and recall operations.



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
293 x 132 mm (3 RU) (11 5/8 x 5 1/4 inches)

MKS-8024A Flexipad Module

The Flexipad Module has 12 Memory Recall buttons, each with a three-colour backlit LCD. These LCDs provide a text/graphic display showing the effects stored for each operational mode. This module is used in combination with Wipe and DME Wipe, and operations such as M/E or PGM/PST. It can also be used for Effects, Shot Box and Macros, and even has an undo capability.

Applicable Models

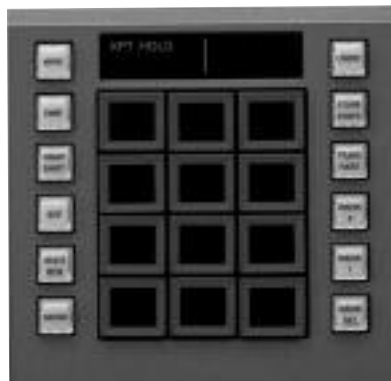
DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

147 x 132 mm (3 RU) (5 7/8 x 5 1/4 inches)



MKS-8025MS Memory Stick /USB Module

The MKS-8025MS Memory Stick/USB module is used to store and load data such as snapshots, effects, set-up data, images, etc. from Memory Stick. It provides a slot for a Memory Stick and has three USB connectors. These connectors provide interfaces for other types of storage media and for menu operating devices such as a mouse, keyboard, and pen/tablet.

*The MKS-8025MS works exclusively with MKS-8010A System Control Unit

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)

MKS-8026A 10 Keypad Module

The 10 keypad module is used to select, store, recall and execute snapshots or effects, and recall and execute Shot Box and Macros. It can also be used to input transition rates. It provides a 12-digit alphanumeric display to show reference region names plus register numbers, depending on its operational mode.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8027A Compact Transition Right Module

The compact 1/2 rack-width transition module fits in a small-scale control panel for edit suits require less space. The module is based on the design of the MKS-8020A Standard Transition Module with simple key transition operations.

Features

- Size reduced to 1/2 rack-width to fit in a compact switcher system
- Uses the same design as the MKS-8020A Standard Transition Module for common transition part
- Key transition part consists of transition button
- Using the MKS-8027A and MKS-8028A for adjacent M/Es, the fader levers do not interfere with each other

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8028A Compact Transition Left Module

The compact 1/2 rack-width transition module fits in a small-scale control panel for edit suits require less space. The module is based on the design of the MKS-8020A Standard Transition Module with simple key transition operations.

Features

- Size reduced to 1/2 rack-width to fit in a compact switcher system
- Uses the same design as the MKS-8020A Standard Transition Module for common transition part
- Key transition part consists of transition button
- Using the MKS-8027A and MKS-8028A for adjacent M/Es, the fader levers do not interfere with each other

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8030A Key Frame Module

The key frame module is used to set and edit keyframes and to execute effects. It consists of an effects execution block and a keyframe setting and editing block. The effects execution block is equipped with a fader lever for manual execution of effects.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8031AJS Joy Stick Module

The joy stick module has identical functionality and are used to position wipes, the 3D Transform of the DME, and also to control tape and disc recorder functions. The parameters of control knobs 1-3 on the main menu panel can also be adjusted using the joy stick.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8031ATB Track Ball Module

The track ball module has identical functionality and are used to position wipes, the 3D Transform of the DME, and also to control tape and disc recorder functions. The parameters of control knobs 1-3 on the main menu panel can also be adjusted using the track ball.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8032A DSK Fader Module

The DSK fader module is used to set up and execute transitions of the four keyers on the PGM/PST bank. A fader lever is included to execute manual transitions of one or more keyers.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
220 x 132 mm (3RU) (8 3/4 x 5 1/4 inches)



MKS-8033A Utility/Shotbox Module

The 24 memory recall buttons of this module have three-colour, backlit LCDs to display the selection of effects and functions in text or graphics. Any Shot Box or Macro, plus a variety of utility functions, can be allocated to the module and any of these preset effects and functions can be instantly executed at the press of a single button. The delegation of all 24 memory recall buttons can be collectively changed at any one time by pressing the bank buttons.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8034ADK DSK/FTB Module

The DSK/FTB module is used to execute Fade-To-Black, and to conduct preview switching using the Edit Preview BUS. Control of externally connected DSKs (PFV-SP Series) is available from the DSK/FTB module.

Applicable Models

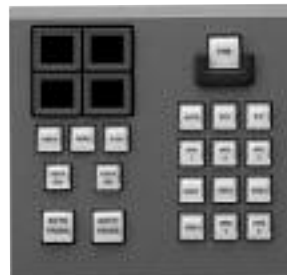
DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

147 x 132 mm (3 RU) (5 7/8 x 5 1/4 inches)



MKS-8034AFB FTB Module

The FTB module is used to execute Fade-To-Black, and to conduct preview switching using the Edit Preview Bus. Control of externally connected DSKs (PFV-SP Series) is available from the DSK/FTB module.

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor

Specifications

General

Dimensions (W x H):

147 x 132 mm (3 RU) (5 7/8 x 5 1/4 inches)



MKS-8035A Key Control Module

The key control module is used to adjust and modify each keyer on any of the M/E or PGM/PST banks. It is also used to assign the DME keyers. The DME allocation block not only displays the current status of the allocation of each DME channel or which key is on-air, but also outputs desired channels to monitors. It can also change the allocated channel to another keyer in a mandatory way.

Applicable Models

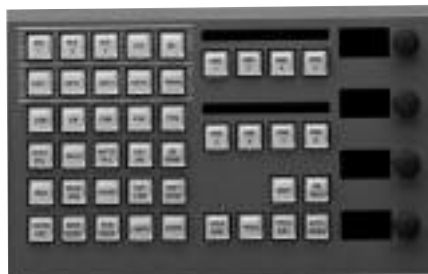
DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8040A Blank Panel

Features

- 1/3 rack width size blank panel

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

147 x 132 mm (3 RU) (5 7/8 x 5 1/4 inches)



MKS-8041A Blank Panel

Features

- 1/2 rack width size blank panel

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 mm x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)



MKS-8075 Extension Adaptor

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):

220 mm x 132 mm (3 RU) (8 3/4 x 5 1/4 inches)

MKS-8076 Memory Card/USB Adaptor

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Specifications

General

Dimensions (W x H):
220 mm x 132 (3 RU) (8 3/4 x 5 1/4 inches)

MKS-8080 Aux Bus Remote Panel

Features

•Compact 1 RU design •Single destination •32 source select buttons and four re-entry buttons •Provides the same button arrangements as those on the CCP-8000/ CCP-9000 Series Center Control Panel for intuitive operation



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Operational Manual (1)
T-Bridge and 75 Ω Terminator (1)

Specifications

General

Power requirements:
100 to 240 V AC, 50/60 Hz
Power consumption:
10 W
Operating temperature:
5 to 40 °C (41 to 104 °F)
Storage temperature:
- 20 to 60 °C (- 4 to 140 °F)
Operating humidity:
10 to 90%
Dimensions (W x H x D):
440 x 44 x 116.5 mm (17 3/8 x 1 3/4 x 4 5/8 inches)
Mass:
Approx. 1.4 kg (3 lb)

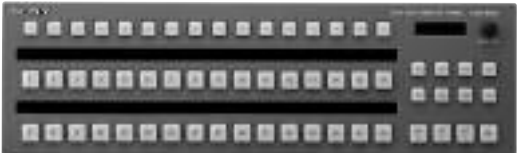
Remote

Remote 1 S-BUS
Connector type:
BNC connector (1)
Data transfer method:
BI-PHASE SPACE
Data transfer rate:
312 kb/s / 1250 kb/s
Remote 2 RS-422A
Connector type:
D-sub 9-pin female (1)
Data transfer method:
Conforming to the EIA RS-422A
Data transfer rate:
38.4 kb/s
Remote 3 RS-232C
Connector type:
D-sub 9-pin male (1)
Data transfer method:
8 bits, Non parity, No check
Data transfer rate:
38.4 kb/s
Signal transfer distance:
500 m (75 Ω coaxial cable, BELDEN 8281 or equivalent)

MKS-8082 Aux Bus Remote Panel

Features

- 3 RU height •Assignable 16 delegation buttons for immediate access to multiple destinations •32 source select buttons and four re-entry buttons •Provides the same button sizes as those on the CCP-8000/CCP-9000 Series Center Control Panel to offer same touch and feel
- Provides source name display



Applicable Models

- DVS-9000 Production Switcher Processor
- DVS-9000SF Production Switcher Processor
- MVS-8000A Multi-Format Switcher Processor
- MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

- Operational Manual (1)
- T-Bridge and 75 Ω Terminator (1)

Specifications

General

- Power requirements:
 - 100 to 240 V AC, 50/60 Hz
- Power consumption:
 - 25 W
- Operating temperature:
 - 5 to 40 °C (41 to 104 °F)
- Storage temperature:
 - 20 to 60 °C (4 to 140 °F)
- Operating humidity:
 - 10 to 90%

Dimensions (W /H /D):

- 440 x 132 x 120 mm (17 3/8 x 5 1/4 x 4 3/4 inches)

Mass:

- Approx. 2.6 kg (5 lb 12 oz)

Remote

Remote 1 S-BUS

- Connector type:
 - BNC connector (1)
- Data transfer method:
 - BI-PHASE SPACE
- Data transfer rate:
 - 312 kb/s / 1250 kb/s

Remote 2 RS-422A

- Connector type:
 - D-sub 9-pin female (1)
- Data transfer method:
 - Conforming to the EIA RS-422A
- Data transfer rate:
 - 38.4 kb/s

Remote 3 RS-232C

- Connector type:
 - D-sub 9-pin male (1)

Data transfer method:

- 8 bits, Non parity, No check

Data transfer rate:

- 38.4 kb/s

Signal transfer distance:

- 500 m (75 Ω coaxial cable, BELDEN 8281 or equivalent)

MKS-9011A 1 M/E Control Panel

The MKS-9011A allows the configuration of a compact 1 ME switcher system that offers the operational convenience and system performance. This compact control panel is well suited for use in small OB VANS and edit suites or as sub remote panels for the MVS-8000/DVS-9000 Series switchers.

Features

- 19-inch rack width with 1 M/E, 12 crosspoint buttons, source name display and 1 Key bus row
- Built-in SCU (System Control Unit)
- Can be used with the MVS-8000 /DVS-9000 Series switchers
- Can be used as a sub M/E remote panel for the MVS-8000/DVS-9000 Series switchers



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Menu Panel Stand Brackets (1)
75 Ω terminator (1)
BNC T-bridge connector (1)
Panel Cable (D-sub 50-pin, 0.4 m) (1)
Switch cover (1)
Key top removing tool (1)
CD-R (*) (1)
Operation manual (1)
Installation manual (1)
Maintenance manual part I (1)

Optional Accessories

HK-PSU11 Redundant PSU
SWC-5002 Control Panel Cable
SWC-5005 Control Panel Cable
SWC-5010 Control Panel Cable

Optional Panels

MKS-8011A Menu Panel
MKS-8031ATB Track Ball Module
MKS-8032A DSK Fader Module
MKS-8033A Utility/Shotbox Module
MKS-8035A Key Control Module
MKS-8041A Blank Panel

Optional Peripherals

MKS-8075 Extension Adaptor

(*) Software and User's guide (E/J)

Specifications

General

Power requirement:
100 to 240 V AC, $\pm 10\%$ 50/60 Hz
Power consumption:
0.9 to 0.4 A
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)
Operating humidity:
10% to 90 % (Non-condensing)

Dimensions (W x H x D)

Main Panel:
440 x 175 x 386 mm
(17 3/8 x 7 x 15 1/4 inches)
Menu Panel:
424 x 220 x 46 mm
(16 3/4 x 8 3/4 x 1 13/16 inches)

Mass

Main Panel:
10 kg (22 lb)
Menu Panel:
2.2 kg (4 lb 13 oz)

Control

Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
Peripheral LAN:
RJ-45, 100Base-TX
GPI:
D-SUB 25-pin, relay contact outputs x 4,
open collector outputs x 4
Remote:
BNC connector, S-BUS
Device:
USB type A
Main Panel:
D-sub 50-pin
Menu Panel:
D-sub 50-pin
Ext Panel:
D-sub 50-pin

MKS-9012A 2 M/E Control Panel

The MKS-9012A allows the configuration of a compact 2 M/E switcher system that offers the operational convenience and system performance. This compact control panel is well suited for use in small OB VANS and edit suites or as sub remote panels for the MVS-8000/DVS-9000 Series switchers.

Features

- 19-inch rack width with 2 M/E, 12 crosspoint buttons, source name display and 1 Key bus row
- Built-in SCU (System Control Unit)
- Can be used with the MVS-8000 /DVS-9000 Series switchers
- Can be used as a sub M/E remote panel for the MVS-8000/DVS-9000 Series switchers



Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

Supplied Accessories

Menu Panel Stand Brackets (1)
75 Ω terminator (1)
BNC T-bridge connector (1)
Panel Cable (D-sub 50-pin, 0.4 m) (1)
Switch cover (1)
Key top removing tool (1)
CD-R (*) (1)
Operation manual (1)
Installation manual (1)
Maintenance manual part I (1)

Optional Accessories

HK-PSU11 Redundant PSU
SWC-5002 Control Panel Cable
SWC-5005 Control Panel Cable
SWC-5010 Control Panel Cable

Optional Panels

MKS-8011A Menu Panel
MKS-8031ATB Track Ball Module
MKS-8032A DSK Fader Module
MKS-8033A Utility/Shotbox Module
MKS-8035A Key Control Module
MKS-8041A Blank Panel

Optional Peripherals

MKS-8075 Extension Adaptor

(*) Software and User's guide (E/J)

Specifications

General

Power requirement:
100 to 240 V AC, $\pm 10\%$ 50/60 Hz
Power consumption:
0.9 to 0.4 A
Operating temperature:
5 °C to 40 °C (41 °F to 104 °F)
Storage temperature:
-20 °C to +60 °C (-4 °F to +140 °F)
Operating humidity:
10% to 90 % (Non-condensing)

Dimensions (W x H x D)

Main Panel:
440 x 186.6 x 442 mm
(17 3/8 x 7 3/8 x 17 1/2 inches)
Menu Panel:
424 x 220 x 46 mm
(16 3/4 x 8 3/4 x 1 13/16 inches)

Mass

Main Panel
11.5 kg (25 lb 5 oz)
Menu Panel:
2.2 kg (4 lb 13 oz)

Control

Control LAN:
RJ-45, 100Base-TX
Data LAN:
RJ-45, 100Base-TX
Peripheral LAN:
RJ-45, 100Base-TX
GPI:
D-SUB 25-pin, relay contact outputs x 4,
open collector outputs x 4
Remote:
BNC type, S-BUS
Device:
USB type A
Main Panel:
D-sub 50-pin
Menu Panel:
D-sub 50-pin
Ext Panel:
D-sub 50-pin

SWC-5002 Control Panel Cable

Features

- 50-pin •2 m •MKS-8010A <—> CCP-8000 Series, MKS-8011A, external panel modules
- MKS-9011/9012 <—> MKS-8011A, external panel modules

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel

SWC-5005 Control Panel Cable

Features

- 50-pin •5 m •MKS-8010A <—> CCP-8000 Series, MKS-8011A, external panel modules
- MKS-9011/9012 <—> MKS-8011A, external panel modules

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

SWC-5010 Control Panel Cable

Features

- 50-pin •10 m •MKS-8010A <—> CCP-8000 Series, MKS-8011A, external panel modules
- MKS-9011/9012 <—> MKS-8011A, external panel modules

Applicable Models

DVS-9000 Production Switcher Processor
DVS-9000SF Production Switcher Processor
MKS-8010A System Control Unit
MKS-9011 1 M/E Control Panel
MKS-9012 2 M/E Control Panel
MVS-8000A Multi-Format Switcher Processor
MVS-8000ASF Multi-Format Switcher Processor

MKS-2050 Editing Keyboard (MVS-8000A, DVS-9000, MFS-2000)

The MKS-2050 Editing Keyboard adds editing functions to the MVS-8000A series, the DVS-9000 series, and MFS-2000 production switcher systems by connecting the MKS-2050 to the MKS-8010A System Control Unit, the MKS-2010, the MKS-2015, or the MKS-2017 Control Panels. The MKS-8010A, the MKS-2010, the MKS-2015, and the MKS-2017 require the BZS-8050 Editing Control Software to be installed.

Supplied Accessories

User Guide (1)
15-pin 10m cable (1)

Optional Accessories

BZS-8050 Editing Control Software
(MVS-8000A, DVS-9000, MFS-2000)



MKS-8050 Editing Keyboard (MVS-8000A, DVS-9000, MFS-2000)

The MKS-8050 Editing Keyboard adds editing functions to the MVS-8000A series, the DVS-9000 series, and MFS-2000 production switcher systems by connecting the MKS-8050 to the MKS-8010A System Control Unit, the MKS-2010, the MKS-2015, or the MKS-2017 Control Panels. The MKS-8010A, the MKS-2010, the MKS-2015, and the MKS-2017 require BZS-8050 Editing Control Software to be installed. The MKS-8050 is a QWERTY keyboard.

Supplied Accessories

User Guide (1)
15-pin 10m cable (1)

Optional Accessories

BZS-8050 Editing Control Software (MVS-8000A,
DVS-9000, MFS-2000)



BZS-8050 Editing Control Software (MVS-8000A, DVS-9000, MFS-2000)

The BZS-8050 Editing Control Software adds editing functions to the MVS-8000A series, the DVS-9000 series, and MFS-2000 production switcher systems. The BZS-8050 requires to be installed to the MKS-8010A System Control Unit, the MKS-2010, the MKS-2015, or the MKS-2017 Control Panels. The MKS-8050 or the MKS-2050 Editing Keyboard is required.

Applicable Models

MKS-2050 Editing Keyboard (MVS-8000A,
DVS-9000, MFS-2000)
MKS-8050 Editing Keyboard (MVS-8000A,
DVS-9000, MFS-2000)

Sony Media Software

Vegas + DVD	288
Cinescore	291
ACID Pro 6	292
Sound Forge 8	294
CD Architect 5.2	296

Vegas + DVD Production Suite

Professional HD video and audio production software

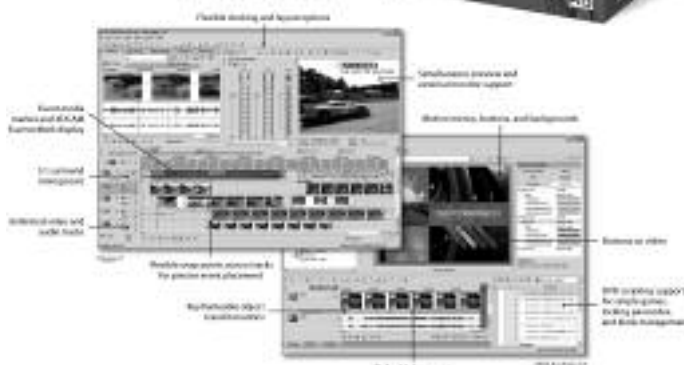
The Vegas™+DVD Production Suite combines Vegas 7, DVD Architect™ 4, and Dolby Digital® AC-3 encoding software to offer an integrated environment for all phases of video, audio, DVD, and broadcast production. A must for the professional media producer, this suite lets you edit and process DV, HDV, SD/HD-SDI, and all XDCAM formats in real time, fine-tune audio with unparalleled precision, and author surround sound, dual-layer DVDs.

Video Features

- Improved HDV, SD/HD-SDI support
- XDCAM SD and HD import and export
- XDCAM Proxy Data support
- XDCAM iLink FAM and Network support
- XDCAM browser
- XDCAM Master to disc
- Multitrack video editing on unlimited tracks
- 3D track motion
- Keyframeable Bézier masks
- Keyframeable transitions, filters, and track motion
- 3-wheel primary and secondary color correction filters
- Waveform, Vectorscope, Parade, and Histogram monitors
- Real-time playback of effects, processes and transitions to external monitor
- Credit rolls and text animation
- Alpha channel support
- Flash™ (.swf) format import
- Support for any aspect ratio (4:3, 16:9, etc)
- Supports multiple file formats and frame rates
- 24p DV support

Audio Features

- Improved multi-processor support
- Broadcast Wave format multichannel support
- AAF track volume and pan info support
- Cinescore plug-in support
- VST plug-in effect support
- Tape-style audio scrubbing
- Audio recording, editing, and mixing on unlimited tracks
- 24-bit/192 kHz audio support
- 5.1 surround mixing tools
- On-the-fly punch-in recording
- Auto-input record monitoring
- 5.1 audio plug-in support for the master bus
- Film-style 5.1 surround panning
- Downmix monitoring
- DirectX® plug-in effects automation
- ACID™ loop properties support
- ASIO driver support
- Keyboard event pitch shifting
- Fader automation
- 32 assignable effects and 26 Master and Aux outputs
- Bus-to-bus routing
- Master, auxiliary, and effects bus tracks



Editing/Workflow Features

- Save and recall window layouts
- Flexible window docking
- Support for XDCAM essence markers
- Envelope brush "painting"
- Improved project copy and trim operations
- Improved multiprocessor rendering
- System-wide media management
- AAF Import/Export
- A/V synchronization detect and repair
- Real-time nondestructive editing
- Split-screen A/B previewing
- Simple drag-and-drop operations
- Network rendering
- Envelope automation recording
- High Definition editing and output
- Searchable Media Pool bins
- Media subclips
- Trimmer window
- Real-time A/V event reverse
- Dual monitor support
- Customizable keyboard mapping
- Dual processor DV rendering support
- Keyboard trimming and event shuffling
- Edit on 23.976, native 24, 25, 29.97 or 30 fps timelines

Capture/Export/Hardware Features

Export directly to PSP
AVC/AAC support
MPEG-2, Insert I-Frame at markers
ATRAC 3 input and output
Import from DVD camcorder disc
SDI deck insert editing per channel
Render to mxf for XDCAM
Blackmagic Design DeckLink™ board support
External control surface support
Advanced streaming media tools
Application scripting for task automation
Subtitle time/text export to DVD Architect software
Windows Media™ 9 Series support, including surround encoding
RealVideo™ 9 support
QuickTime® format support
VideoCD and multimedia CD burning
Red Book audio CD production
EDL export
MPEG-1&2 support
Supports Windows Media® and RealMedia® commands
Sony DSR-DU1 and DSR-DR1000 disc recorder support
J-H3 HDCAM player support for DV downconverts
3:2 pulldown removal from DV .AVI files
Exports chapter markers and subtitles to DVD Architect™ 4 software

DVD Architect 4 Features

General Features

Scripting support
Random playlist playback
Parental control
Cinescore plug-in integration
Photoshop® (PSD) layer support
Jacket picture creation
Theme export
Integration with Vegas™ software
Menu-based and single movie DVD creation
Media Explorer
Adjustable Project and File Optimization Settings
Multi-monitor support
Multi-processor support
Fully customizable toolbars

DVD Editing and Layout Features

Keyframeable transformations
Keyframeable crop and effects
Graphical subtitles
Title reordering
Snap to I-Frame
4:3 and 16:9 preview settings
DVD Mastering tools: DLT, DDP, CMF
Project playlists
Copy-protection tools (CSS and Macrovision®)
Media effects
Project navigation tool

Still and motion menu creation
Support for multiple video titles
Real-time external monitor preview via i.LINK®/IEEE-1394
Subtitle creation and support
Multiple audio track support
Programmable end actions for menus and media
Project overview window
Enhanced asset behavior control
Multiple menus with up to 36 buttons per menu
Menu object editing, alignment and sizing tools
Text editing and shadow effects
Slide image rotation
Add, edit, and move chapter points
Title and Action safe grid area
Customizable Themes
Menu looping

Video Features

Buttons on video
Crop and adjust dialog
Slideshow animations
Multiangle video selection
DVD movie creation
Picture slideshows
Elementary stream import
24p DVD encoding
No re-encoding of compliant files
NTSC and PAL in normal (4:3) and wide-screen (16:9) formats
Imports AVI, MPEG-1, MPEG-2, MOV, WMV, and a variety of still image formats

Audio Features

ATRAC Support
Multiple audio track support
Music compilations
Attach audio files to menus
Media file previewing
Import WAV, MP3, WMA, PCA, AIF, MPEG audio, AC-3
5.1 or stereo into your DVD Architect project
24-bit/192kHz audio support

Testing and Burning Features

Burn mastered folder
8cm to 12cm DVD Copy
Button overlap indication
Smart-project reprepare
Dual-layer burning and authoring support
Real-time project previewing with virtual DVD remote control or to external monitor
DVD project verification and preparation
Advanced DVD disc optimization with adjustable bitrates
Fit to disc option
Supports a wide variety of DVD burners

Supported Formats:

Imports: AA3, AAF, AIF, ASF, AVI, BMP, BWF, DLX, DV, GIF, JPG, M2T, MOV, Sony MXF, MP3, MP4, M4A, MPEG-1 and MPEG-2 video, OGG, OMA, PCA, PNG, PSD, QT, SFA, SND, SWF*, TIFF, TGA, W64, WAV, WMA, WMV

Renders: AA3, AIF, ATRAC, AVI, MP3, MOV, MP2, MP4, Sony MXF, OGG, PCA, RM, W64, WAV, WMA, WMV

DVD encoding, Video: NTSC 4:3, NTSC Widescreen, PAL 4:3, PAL Widescreen
DVD encoding, Audio: AC-3 5.1 or stereo, PCM

*ActionScripting, motion video, and audio not supported.

System Requirements:

Microsoft® Windows® 2000 SP4, XP Home, or XP Professional
(Windows XP SP2 required for HDV and XDCAM)
800 MHz processor (2.8 GHz recommended for HDV)
200 MB hard-disk space for program installation
600 MB hard-disk space for optional Sony Sound Series Loops & Samples reference library installation
256 MB RAM, 512 MB recommended for HDV
Windows-compatible sound card
OHCI compatible i.LINK connector/IEEE-1394DV card (for DV and HDV capture and print-to-tape)
DVD-ROM drive (for installation from a DVD only)
Supported DVD-recordable drive (for DVD burning only)
Supported CD-recordable drive (for CD burning only)
DirectX 9.0c or later (included on DVD-ROM)
Microsoft .NET Framework 2.0 (included on DVD-ROM)
Internet Explorer 5.1 or later (included on DVD-ROM)

Please Note: Product requires online registration within 30 days.

Related Items:

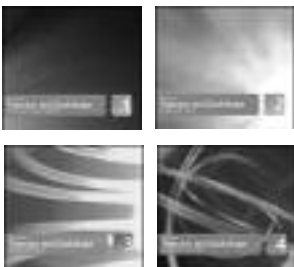
Sony Pictures Sound Effects Series

Sony Pictures Entertainment has opened its audio archives to producers everywhere. These exclusive collections of essential sound effects represent the best in sound design and field-recorded materials. Created by the industry's most respected audio professionals, these effects come from one of the world's leading motion picture studios.



Sony Vision Series: 3D Textures & Backdrops

The Vision Series multimedia creation assets deliver unlimited creative potential. These libraries are packed full of textures, backdrops, and stock footage that provide dynamic, royalty-free solutions to enhance any desktop video production. Vision Series libraries ensure that projects are always broadcast quality. Collect them all to keep your video productions looking distinctive.



Cinescore

Professional soundtrack creation software

Cinescore™ software is a breakthrough in professional soundtrack creation, generating fully composed, multi-genre, royalty-free production music in a matter of seconds. Adjust parameters such as mood, intensity, tempo, and variation to create a virtually unlimited number of musical variations, then save your custom variations for use in future projects. Cinescore software imports a wide range of file formats, including PSD, JPG, SWF, PCA, AVI, MP3, WMV, and WAV. There's no need to use separate applications to transcode your media. Create dynamic and effective musical tracks for movies, slideshows, commercials, radio productions and more with the push of a button.

Features

- Automatically generates music to fit project length
- Includes 20 fully customizable Themes in multiple genres
- 16-bit, 44.1/48 kHz song quality for high-fidelity performance
- User-defined settings yield unlimited musical results
- Custom variations can be created and saved
- Hint Markers control changes in tempo, mood, and intensity
- Multiple ending types for generated media
- Includes over 300 sound effects and audio transitions
- Themes sorted based on instruments, keywords, and more
- Video scoring track and real-time preview window
- Audio sweetening track
- Real-time editing during playback
- Interactive Show Me How tutorials and online help
- Volume and pan envelopes
- Audio time stretching
- Track markers and regions
- CD audio extraction
- External monitor preview
- Unlimited undo/redo
- Project media bins

Supported Formats:

Imports: AA3, AIF, ASF, AVI, BMP, DV, GIF, JPG, MOV, MP3, MP4, M4A, MPEG-1 and MPEG-2 video, OGG, OMA, PCA, PNG, PSD, QT, SFA, SND, SWF*, TIFF, TGA, W64, WAV, WMA, WMV

Renders: AA3, AIF, AVI, MP3, MOV, MP2, MP4, OGG, PCA, RM, W64, WAV, WMA, WMV

*ActionScripting, motion video, and audio not supported.

System Requirements:

Microsoft® Windows® 2000 (SP4) or XP
 1.5 GHz processor
 512 MB RAM (1 GB recommended)
 200 MB hard-disk space for program installation
 1.7 GB hard-disk space for optional Cinescore Theme installation
 Windows-compatible sound card
 CD-ROM drive (for installation from a CD only)
 DVD-ROM drive (for installation of Themes and audio transitions)
 DirectX 9.0c or later (included on DVD-ROM)
 Internet Explorer 5.1 or later (included on DVD-ROM)

Related Items:

Cinescore Theme Packs: Royalty-Free Production Music

Each Cinescore Theme Pack is a collection of ten Cinescore Themes designed for a general purpose that can be opened and adjusted within Cinescore software. While Theme Packs are geared to provide soundtracks for specific situations, the flexibility of the Themes themselves ensures that Theme Packs will provide perfect musical solutions across an extraordinarily wide range of scenes. Each Theme contains multiple mood and variation presets that you can easily fine-tune to produce an unlimited number of unique, royalty-free compositions that fit perfectly to the length of your video clip.



Cinescore Theme Packs



Pass the Ring



High Tech World



Ideal Vacation



Incredible Vistas

ACID Pro 6

Professional Music Workstation

ACID™ Pro 6 software is a professional music workstation for composing, recording, mixing, and arranging audio and MIDI tracks. New multitrack technologies and full MIDI sequencing join legendary ACID looping functionality to form an incomparable environment for music creation and production. ACID Pro 6 software includes a custom edition of Native Instruments™ Kompakt and over 1,000 loops so you can start making music right out of the box. Native support for VST instruments and plug-ins expands your palette of available sounds.

Features

Fundamentals

- Unlimited tracks of audio and MIDI
- 24-bit, 192 kHz hard disk recording
- Real-time nondestructive editing
- Over 1,000 music loops in multiple genres
- Preview loops in real-time with your project
- Alternate time signature support
- ASIO driver support
- Support for control surfaces including Mackie Control and Frontier Design TranzPort
- Dual/Multi-core processor support
- Master, auxiliary, soft synth, and effects bus tracks
- System-wide media management
- Metronome for playback and record
- Customizable UI and keyboard mapping
- Multiple file format support
- Unlimited undo/redo history
- External monitor support
- Get Media option to download media from the Web
- Integrated disc-at-once and track-at-once CD burning
- Sony Net MD format export
- ATRAC3™, ATRAC3plus™, and ATRAC Advanced Lossless™ support
- Gracenote MusicID™ CD album identification
- CD extraction
- One-click music publishing• to ACIDplanet.com

Mixing and Editing

- Multitrack audio and MIDI recording
- Multiple media events per track with automatic crossfades
- On-the-fly punch-in recording
- Beatmapper remixing tool
- Chopper editing tool with loop cloning
- Track mute and solo
- Tempo, time signature, and key change markers
- Tempo and key mapping
- Project sections for easy arranging
- Freehand envelope drawing on the timeline
- 5.1 surround film-style panning
- Nestable folder tracks
- Volume and Pan envelopes



- Ripple editing across multiple tracks
- Real-time placement of markers during playback
- Drop one-shots in real time
- Real-time event reverse
- Frame-accurate video scoring
- Bus-to-bus routing
- Downmix monitoring
- Attack, Sustain, and Release (ASR) envelopes

MIDI

- Inline MIDI editing
- MIDI track envelopes and keyframes
- Drum grid editing mode with drum key maps
- MIDI piano roll snap-to-scale filtering
- Real-time MIDI quantization
- VSTi soft synth support and parameter automation
- DLS 1 & 2 soft synth support
- MIDI filtering and processing
- MIDI event list editing and step recording
- MIDI Time Code (MTC) generation and triggering
- MIDI file export
- MIDI piano roll editing
- MIDI event list editing
- MIDI step recording

Audio Control

- Includes Native Instruments KOMPAKT Sony ACID Pro edition
- Over 20 DirectX audio effects including delay, EQ, compressor, resonant filter, reverb, flange, chorus, and distortion
- VST effects support with automation and tempo sync
- Envelope automation recording
- Record input monitoring
- Groove quantization tools
- ReWire mixer and device support
- Audio plug-in manager
- Bypass all effects command
- 32 assignable effect chains
- 26 auxiliary busses
- Direct links to audio editors

Supported Formats:

Imports: Macintosh® AIFF (uncompressed) (.aif), Adaptive Transform Acoustic Coding (unprotected) (ATRAC), Windows® Video (.avi), Windows® Bitmap (.bmp), CompuServe Graphics Interchange Format (.gif), Joint Picture Experts Group (.jpg), MIDI (.mid), QuickTime® Movie (.mov), MPEG-1 Layer 3 (Audio) (.mp3), MPEG-1 and MPEG-2 Video** (.mpg), OGG Vorbis (.ogg), Perfect Clarity Audio™ (.pca), Portable Network Graphics (.png), Adobe® Photoshop® (.psd), Macromedia Flash*** (.swf), Targa® File Format (.tga), Tagged Image File Format (.tif), Sony Wave64 (.w64), Microsoft Wave® (uncompressed) (.wav), Windows Media® Audio 9 Series (.wma), Windows Media Video 9 Series (.wmv)

Saves: Dolby Digital AC-3 (.ac3)*, Macintosh® AIFF (uncompressed) (.aif), Adaptive Transform Acoustic Coding (unprotected) (ATRAC), Windows® Video (.avi), MIDI (.mid), QuickTime Movie (.mov), MPEG-1 Layer 3 (Audio) (.mp3), MPEG-1 and MPEG-2 Video** (.mpg), OGG Vorbis (.ogg), Perfect Clarity Audio™ (.pca), RealAudio® (.rm), RealVideo® (.rm), Sony Wave64 (.w64), Microsoft Wave® (uncompressed) (.wav), Windows Media® Audio 9 Series (.wma), Windows Media® Video 9 Series (.wmv)

*AC-3 encoding requires separate purchase of the Sony Media Software AC-3 encoder.

**MPEG-1&2 support requires the purchase of the MainConcept MPEG plug-in from Sony Media Software.

***ActionScripting, motion video and audio not supported.

System Requirements:

Microsoft® Windows® 2000 (SP4) or XP
1 GHz processor (1.2 GHz if using video)
150MB hard-disk space for program installation
600 MB hard-disk space for optional Sony Sound Series Loops & Samples reference library installation
2.2 GB hard-disk space for installation of Native Instruments Kompakt Sony ACID Pro edition
256 MB RAM, 512 MB recommended
Windows-compatible sound card
DVD-ROM drive (for installation from a DVD only)
Supported CD-Recordable drive (for CD burning only)
DirectX 9.0c or later (included on DVD-ROM)
Microsoft .NET Framework 1.1 SP1 (included on DVD-ROM)
Internet connection (for Gracenote MusicID™)
Internet Explorer 5.1 or later (included on DVD-ROM)

Please Note: Some features may require product registration.

Related Items:

Sony Sound Series: Loops & Samples

The Sony Sound Series collection has over 125 CD libraries of loops and samples, with new titles added monthly. Find royalty-free audio content in nearly every music genre and style. Optimized for use in ACID software applications, each loop contains our signature time-stretching and pitch-matching metadata. Now an industry standard, the "ACIDized™" loop format is supported by all leading music creation applications.



**Global Groove Standard
Collection library**



**Dr. Fink's Funk Factory
Premium Collection library**



Chicago Fire box set

Sound Forge 8

Professional audio editing and production software

Sound Forge™ software is the tool of choice for media professionals who want to create and edit digital audio files with speed and absolute precision. Acclaimed for its power, stability, and no-nonsense interface, it's the fastest way to get from raw audio to finished master. Sound Forge software is everything you need to analyze, record, and edit audio, produce music loops, digitize and clean-up old recordings, model acoustic environments, create streaming media, and master replication-ready CDs. Includes CD Architect™ 5.2 software.



Features

Processes

- Auto Trim/Crop
- Mute
- Channel Converter
- Normalize peak or RMS Level
- Stereo Pan/Expand (supports mid-side mixing)
- Graphic, Paragraphic, and Parametric EQ
- DC Offset
- Resample
- Reverse
- Graphic Fade with noise-shaping and dithering
- Smooth/Enhance
- Fade In/Out
- Time Compress/Expand
- Insert Silence
- Volume
- Invert/Flip
- Bit Depth Converter (to 8-bit, 16-bit, 24-bit, or 32-bit)

Effects

- VST plug-in effect support
- DirectX plug-in effects automation
- DirectX Plug-in Manager
- Real-time effects previewing
- Modeless audio plug-in Chainer
- Acoustic Mirror™ environment simulator
- Amplitude Modulation
- Chorus
- Distortion
- Delay/Echo (Simple and Multi-Tap)
- Graphic Dynamics
- Multi-Band Dynamics
- Envelope
- Flange/Wah-Wah/Phaser
- Gapper/Snipper
- Noise Gate
- Pitch Bend/Shift
- Reverb
- Vibrato
- Wave Hammer Compressor/Volume Maximizer

Automatable Effects

- Amplitude Modulation
- Chorus
- Distortion
- Flange/Wah-wah
- Graphic Dynamics
- Multi-Band Dynamics
- Reverb
- Simple Delay
- Smooth/Enhance
- Sound Forge Pan
- Sound Forge Volume
- Vibrato

Tools

- Includes CD Architect 5.2
- Direct file export to CD Architect software
- Application scripting
- Script editor window
- Batch converter functionality
- Track at once CD burning
- Drag-and-drop CD extraction
- Spectrum Analysis™ tools
- Clipped peak detection and marking
- Vinyl Restoration™ plug-in
- FM Synthesis with envelope
- White, pink, brown and filtered noise generators
- Simple synthesis sweep
- Auto Region (using beats and measures, or peak detection)
- Crossfade Loop
- Extract Regions
- Find Tool
- Enhanced Preset Manager
- Sampler Tool
- Statistics Tool (Max, RMS, DC offset, Zero Crossings)
- DTMF/MF Tone Synthesis

Editing/Workflow

- Audio scrubbing tool
- JKL keyboard commands for scrub
- Customizable keyboard mapping
- Windows XP theme support
- Save paths in rendered media
- Real-time nondestructive editing
- Simple drag-and-drop operations
- Multitask background rendering
- Media Explorer window
- Undo/redo history
- Docking windows

Recording/Playback

- ASIO™ driver support
- Automated time-based recording
- Audio threshold record triggering
- Prerecord buffer
- Auto calibration for DC Offset
- Generate SMPTE/MIDI Time Code
- Glitch/Gap Detection
- Punch In option
- Pre-roll to Cursor
- Real-time record/playback meters (VU/PPM and standard)
- Remote record function

Regions and Playlists

- Updated Regions List and Playlist windows
- Real-time editing of fields
- List sorting
- Nondestructive playlist
- Name markers, loops, regions
- Trigger with sequencers
- Trigger with MIDI event-generating devices
- Trigger with time code-generating devices

Sample Editing

- Pop-up MIDI keyboard to test samples
- Sustaining Loop
- Release Loop
- Real-time loop tuning window
- Generate/Receive MIDI Time Code
- SCSI/SMDI or MIDI/SDS sample transfer
- Sustaining Loop, Release Loop

Timing Basis

- Absolute Frames
- Measures and Beats
- Samples, Time, Seconds
- SMPTE Drop/Non-Drop
- SMPTE EBU/Film Sync
- Time and Frames

Encoding/Video Support

- Flash (.swf) format import
- HD video options
- Video saving and render options (fast video resizing, deinterlace, source video resampling, and video stretching)
- Windows Media® 9 Series import and export
- QuickTime® 6 import and export, RealMedia® 9 export
- Support for 24fps DV video files
- Display exact video frame animation above waveform
- MOV and MPEG-1 and MPEG-2• format import
- Windows Media Video 9 format support
- External monitor support using DV and IEEE 1394 devices
- Maintain perfect sync while working with full NTSC and PAL video
- Sound and video synchronization with sub-frame accuracy
- Various video and audio compression options
- Tools for ACID Software
- Publish to ACIDplanet.com
- Create loops for ACID software
- Loop-editing toolbar
- Assign root notes, number of beats, and tempo
- *MPEG-1&2 support requires the purchase of the MainConcept™ MPEG plug-in.

Supported Formats:

Opens: AIF/SND Macintosh® AIFF, AU/SND NeXT/Sun (Java) (PCM, µ-Law), AVI Microsoft® Video for Windows®, DIG/SD Sound Designer 1, IVC Intervoice (ADPCM, µ-Law, A-Law), MOV Apple® QuickTime® Movie, MP3 MPEG-1 Layer 3 (Audio), MPG® MPEG-1 or MPEG-2 Video, OGG Ogg Vorbis, PCA Perfect Clarity Audio™, QT Apple QuickTime 6, RAW Raw Files (8- and 16-bit data: signed, unsigned, and Motorola and Intel byte ordering), SWF™ Macromedia Flash, VOX Dialogic VOX (ADPCM), W64 Sony Media Software Wave 64™, WAV Microsoft Wave®, WMA Microsoft Windows Media® 9 (audio), WMV Microsoft Windows Media 9 (video), 24fps DV video files

Saves: AIF/SND Macintosh® AIFF, AU/SND NeXT/Sun (Java) (PCM, µ-Law), AVI Microsoft® Video for Windows®, DIG/SD Sound Designer 1, IVC Intervoice (ADPCM, µ-Law, A-Law), MOV Apple® QuickTime® Movie, MP3 MPEG-1 Layer 3 (Audio), MPG® MPEG-1 or MPEG-2 Video, OGG Ogg Vorbis, PCA Perfect Clarity Audio™, QT Apple QuickTime 6, RAW Raw Files (8- and 16-bit data: signed, unsigned, and Motorola and Intel byte ordering), RM RealNetworks® RealAudio® 9, RM RealNetworks RealVideo® 9, VOX Dialogic VOX (ADPCM), W64 Sony Media Software Wave 64™, WAV Microsoft Wave®, WMA Microsoft Windows Media® 9 (audio), WMV Microsoft Windows Media 9 (video), 24fps DV video files

*MPEG-1&2 requires separate purchase of the MainConcept MPEG plug-in

**ActionScripting, motion video and audio not supported

System Requirements:

- Microsoft® Windows® 2000, XP Home, or XP Professional
- 500 MHz processor
- 150 MB hard-disk space for program installation
- 128 MB RAM
- Windows-compatible sound card
- CD-ROM drive (for installation from a CD only)
- Supported CD-Recordable drive (for CD burning only)
- Microsoft DirectX® 8 or later (included on CD-ROM)
- Microsoft .NET Framework 1.1 SP1 (included on CD-ROM)
- Internet Explorer 5.1 or later (included on CD-ROM)

Please Note: Some features may require product registration.

CD Architect 5.2

Professional Red Book audio CD mastering software

Produce professional audio CDs to Red Book specification with CD Architect™ software. It's everything you need to produce professional CDs from beginning to end. Perform full PQ code editing including track and index positions, ISRC codes, and pause times. With CD Architect software you can apply effects to individual tracks, sections of a track, or the master bus. Create live-style CDs with audio in the time between tracks, apply volume envelopes and event ASR envelopes, and even create hidden tracks. Create custom crossfades and generate disc-at-once premasters suitable for professional replication. CD Architect software uses simple drag-and-drop operations and supports most CD burners.

Features

General Editing

- Support for up to 32-bit, 192kHz source audio
- High-quality resampling and dithering with noiseshaping
- Single or multi-file playlisting
- Volume and ASR envelopes for any event
- CD Text support
- Multiple levels of undo/redo
- Override validation errors option
- Mono-to-stereo conversion on the fly
- CD transport controls
- Direct file open into Sound Forge™ software
- Track creation from Sound Forge regions
- Trimmer window
- Media Explorer
- Ripple editing
- CD Image file rendering
- Automatic crossfades
- Greater than 1:1 time zoom
- Reading and extraction of PQ data along with audio tracks
- Complete control over tracks, marker placements, and indices
- Preview multiple tracks or ranges of audio before extraction from a supported CD device
- Stereo master volume fader and adjustable envelope controls for any region.
- Media Pool
- Multiple file format support without conversion
- Autosave crash recovery
- Undo/redo history list
- Supports MP3, AIFF, Ogg Vorbis, Windows Media® Audio, and more



Mastering

- Over 20 real-time DirectX® plug-ins
- Event and master bus effects model
- Audio layering to create complex crossfades
- Event Normalization
- Real time pitch shift/time stretch
- Slip trimming
- Audio phase invert
- Audio scrubbing
- Unlimited volume envelope points

CD Design

- Full PQ code editing support, including track and index positions and pause times
- Absolute times for replication
- Print cue sheets and format CD liner notes
- Up to 99 tracks
- Up to 99 subindices per track
- Smart track reordering
- Automatic pause time indication
- Relative times for liner notes
- Timeline event locking
- Adjustable pause times
- Audio CD player un-mute fade emulation

CD Writing

Burns disc-at-once premaster CDs for professional replication

USB, FireWire, SCSI and IDE/ATAPI CD-R and CD-RW drive support

Overburn support of 80 minute and other size CD-Rs

Buffer underrun protection

Test burn mode

PQ list verification for Red Book compatibility prior to burn

Burn speed selection

Copy-inhibit flags

Pre-emphasis flags

Audio clipping detection

International Standard Recording Codes (ISRC)

Universal Product Codes (UPC)

Media Catalog Numbers (MCN)

Supported Formats:

Imports: Wave (.wav), CD Audio (.cda), CD Architect™ 4 or 5 project (.cdp), Audio Interchange File Format (.aif, .aiff), MPEG-1 Layer 3 (.mp3), Windows Media Audio (.wma), Ogg Vorbis (.ogg), QuickTime® audio (.qt, .mov), Perfect Clarity Audio (.pca), Wave64 (.w64), Sony Pictures Digital Audio (.sfa), Dialogic VOX ADPCM (.vox), Intervoice (.ivc), NeXT/Sun (.au, .snd), Sound Designer 1 (.dig, .sd)

Exports: Wave Image (.wav), CD Architect 5 Project (.cdp)

System Requirements:

Microsoft® Windows® 2000, XP Home, or XP Professional

500 MHz processor

40 MB hard-disk space for program installation

128 MB RAM

Windows-compatible sound card

CD-ROM drive

Supported CD-Recordable drive (for CD burning only)

Microsoft DirectX® 8 or later (included on CD-ROM)

Internet Explorer 5.1 or later (included on CD-ROM)

Please Note: Some features may require product registration.

SONY

Audio Mixer & Consoles

DMX-P01	300
SRP-X700P	301
SRP-X500P	302

DMX-P01 Portable digital mixer

Features

- Portable, digital field-mixer designed for ENG/EFM application
- Compact (266 x 68 x 206 mm) and lightweight (Approx. 2.2 kg)
- 24-bit A/D and D/A converters and internal 32-bit DSP for excellent sound quality
- 4 microphone/line inputs with +48 V mic power (on/off)
- 2 channels of balanced analogue output and AES/EBU digital output (stereo) via XLR-type connectors
- Digital cascade input with phono connector
- Coaxial output connector for mix-bus output or S/PDIF digital output
- Selectable sampling rate: 48 kHz or 96 kHz
- Full control of every parameter from the front panel using physical and menu-driven controls
- Digital limiters on both inputs and outputs, and digital compressors on outputs
- A scene memory recall feature to instantly recall up to ten different user-defined parameter settings or factory default settings
- A power-on memory function recalls parameters in three different ways: default factory settings, the last used settings or parameters of one specific scene memory
- Easy-to-read backlit LCD panel displays output levels and setup menus, and allows various parameter settings
- Meter calibrations can be selected from six types: VU, BBC type, DIN type, NORDIC type, IEC type1, and dBFS
- Camera-audio return-level check via 12-pin connector
- Panel lock and parameter lock function
- Adjustable HPF with two user settings
- Operates on eight AA-size alkaline (LR6) batteries or external DC 10 to 15 V power
- Spare battery-compartment for quick battery change



Applicable Models

- PDW-510 XDCAM Camcorder (DVCAM Recording)
- PDW-510P XDCAM Camcorder (DVCAM Recording)
- PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)
- PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Supplied Accessories

- Spare battery compartment (1)
- Meter scale sheets (6)
- Ferrite clamp filters (2)
- 12-pin male connector (1)
- Rubber foot (4)

SRP-X700P Digital Powered Mixer (220/230V)

Features

- Ideal for conference rooms, lecture theatres and other presentation applications
- Contains the functions of a high-quality digital audio mixer, power amplifier, wireless mic receiver, RGB/video switcher, feedback reducer and equalizer in a compact 3U high unit
- Accepts 3 RGB/component, 3 composite and 3 S-video inputs, and selects 1 RGB/component, 1 composite, and 1 S-video for outputs
- High-quality component signals (480p/1080i) and RGB signals with 150 MHz frequency response (1280x1024 pixels, SXGA)
- Mixes wireless mic and wired mic inputs with audio from video/DVD players for 10 outputs
- 24-bit AD/DA conversion at 48kHz sampling frequency
- 6 mic inputs with phantom powering, 2 wireless mic (or line) inputs, and 2 line inputs
- Wireless mic slots for storing 2 WRU-806A/806B tuner modules
- 200W+200W(4Ω)/150W+150W(8Ω)/max.150W (70V Line) digital power amp
- Feedback reducer, parametric EQ, LCF (100Hz), compressor/limiter, delay, automatic mixing and flexible signal routing all performed in a digital domain
- 20 scene memories with quick memory recall capacity
- Remote control of SRP-X700P via USB, RS-232C or parallel ports from a PC, a system controller or a control panel
- RS-232C output port for remote control of a projector/plasma display unit
- Control-S ports for remote control of VCRs, DVD/CD/MD players and video/data projectors
- Parallel output port for remote control of environment devices
- Supplied software for comprehensive set-up and controls of SRP-X700P



Supplied Accessories

- AC power cord (1)
- IR Transmitter (1)
- Foot (4)
- Control software disc* (1)
- Operation manual (1)

Optional Peripherals

- WRU-806A UHF Synthesized Tuner Unit (64U)
- WRU-806A UHF Synthesized Tuner Unit (66U)
- WRU-806A UHF Synthesized Tuner Unit (68U)
- WRU-806B UHF Synthesized Tuner Unit (6264U)
- WRU-806B UHF Synthesized Tuner Unit (6668U)
- AN-820A UHF Antenna

*System requirements PC: Windows 98SE, Windows 2000, Windows ME, or Windows XP

SRP-X500P Digital Powered Mixer/Switcher (220V)

Features

- Same as the flagship model SRP-X700P, the SRP-X500P integrates the functionality of the following seven devices to prepare for the scenes of today's modern presentations requiring a wide range of A/V sources, in its compact 3U height, 19-inch rack-mountable chassis
- Ideal for conference rooms, lecture theatres and other presentation applications
- Contains the functions of a high-quality digital audio mixer •RGB Switcher •Video Switcher
- Wireless Tuner Base Unit •Audio Mixer •Power Amplifier
- Feedback Reducer •Equalizer •All-In-One Design
- High Quality Digital Processor •Versatile Interface
- Integrated Wireless Tuner Unit Slots •Comprehensive Remote Control •Built-in Four-Channel Digital Power Amplifier



Supplied Accessories

- Power cord (1)
- Feet (4)
- CD-ROM (1)
- Operating Instructions (1)
- Antenna (2)

Optional Peripherals

- AN-820A UHF Antenna
- UWP-X1/X2 Wireless Microphone Package
- WRU-806A UHF Synthesizer Tuner Unit
- RM-AV3000 series Universal Remote Commander

Wired Microphones

DC-78	304
ECM-166BC	304
ECM-166BMP	305
ECM-322BC	306
ECM-322BMP	306
ECM-44B	307
ECM-44BC	308
ECM-44BMP	309
ECM-530	310
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ECM-674	314
ECM-678	315
ECM-77B	316
ECM-77BC	317
ECM-77BMP	318
ECM-77BPT	319
ECM-88B	320
ECM-88BC	321
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ECM-88FPT	322
F-112	323
F-710	324
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AD-KIT88B	326
SAD-H88B	326
SAD-V88B	326
SAD-W88BL	326
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AD-KIT88	327
SAD-88B	327
SAD-P88	327
SAD-W88B	328
AD-R88B	328
AD-C88	328
AD-KIT77	328
SAD-H77B	329
SAD-V77B	329
SAD-W77B	329
SAD-S77	329
AD-R77B	330
AD-C77B	330
AD-C77	330
AD-R66B	330
SAD-H55B	331
AD-R55B	331
SAD-H44B	331
AD-R44B	331

DC-78 Power Supply Unit

Features

- Designed for use with Sony lavalier microphones equipped with a Sony 4-pin (SMC9-4P) connector
- Two-way powering: battery operation (using an AA-size (LR6) alkaline battery) or external DC operation (12 to 48 V)
- Supplied with an SMC9-4S input connector and an XLR 3-pin output connector

Applicable Models

ECM-88 Lavalier Microphone

Specifications

Power requirements:

- Internal battery: DC 1.5 V (AA-size (LR6) alkaline battery)
- External battery: DC 12 to 48 V

Battery life:

- Approx. 6000 h

Input connector:

- Sony 4-pin (SMC9-4S)

Output connector:

- XLR-3-12C type

Dimensions:

- 20.0 dia. x 144.0 (h) mm
(13/16 x 5 3/4 inches)

Mass:

- Approx. 130 g (4.59 oz) including batteries



ECM-166BC Lavalier Microphone

Features

- Uni-directional, electret condenser microphone
- Resistant to howling by rejecting indirect sound
- Ideal for institutional uses and sound contracting applications such as speeches, lectures and conferences
- Microphone head: 12.5 mm dia x 23.5 mm (1/2 inch dia. x 15/16 inch), 3.5 g (0.12 oz, microphone only)
- SMC9-4P type connector for use with WRT-822A/822B/860A



Supplied Accessories

- Urethane wind screen (1)
- Holder clip (1)

Specifications

Capsule type:

- Electret Condenser

Directivity:

- Uni-directional

Frequency response:

- 100 Hz to 10 kHz

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

- 45 dB (5.6 mV)

Output impedance (at 1 kHz):

- 2.5 k Ω \pm 30% (unbalanced)

Dynamic range:

- 96 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz, 1

Pa.):

- 60 dB or more

Inherent noise:

- 34 dB SPL or less

Max. input sound pressure level:

- 130 dB SPL

Normal operating voltage:

- DC 3 V (supply range: DC 3 to 10 V)

Current drain:

- 0.4 mA or less

Output connector:

- SMC9-4P type

Cable length:

- 1.2 m (3.9 feet)

Dimensions (microphone head):

- 12.5 mm dia. x 23.5 mm
(1/2 inch dia. x 15/16 inch)

Mass (microphone head):

- 3.5 g (0.12 oz)

*0 dB SPL = 2E-5 Pa.

ECM-166BMP Lavalier Microphone

Features

- Uni-directional, electret condenser microphone
- Resistant to howling by rejecting indirect sound
- Ideal for institutional uses and sound contracting applications such as speeches, lectures and conferences
- Microphone head: 12.5 mm dia x 23.5 mm (1/2 inch dia. x 15/16 inch), 3.5 g (0.12 oz, microphone only)
- 3-pole mini plug with a stable lock mechanism for use with WRT-805A/805B

Supplied Accessories

- Urethane wind screen (1)
- Holder clip (1)
- Operation manual (1)

Specifications

Capsule type:

Electret condenser

Directivity:

Uni-directional

Frequency response:

100 Hz to 10 kHz

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

-45 dB (5.6 mV)

Output impedance (at 1 kHz):

2.5 k Ω \pm 30% (unbalanced)

Dynamic range:

96 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz, 1 Pa.):

60 dB or more

Inherent noise:

34 dB SPL or less

Max. input sound pressure level:

130 dB SPL

Normal operating voltage:

DC 3 V (supply range: DC 3 to 10 V)

Current drain:

0.4 mA or less

Output connector:

3.5 mm dia., 3-pole mini plug

Cable length:

1.2 m (3.9 feet)

Dimensions (microphone head):

12.5 mm dia. x 23.5 mm
(1/2 inch dia. x 15/16 inch)

Mass (microphone head):

3.5 g (0.12 oz)

*0 dB SPL = 2E-5 Pa.



ECM-322BC Electret Condenser Microphone

Features

- Supplied with a Sony 4-pin connector (SMC9-4P) for use with the WRT-8B/822B bodypack transmitter
- Optimum sound pickup
- Ear-clip style
- Adjustable microphone position
- Secure and comfortable fit
- Compact and lightweight design

Supplied Accessories

- Operating instructions (1)
- Carrying case (1)

Specifications

- Capsule type
 - Electret Condenser
- Frequency response
 - 70 Hz to 15 kHz
- Directivity
 - Omni-directional
- Sensitivity (0 dB=1 V/Pa, at 1 kHz)
 - 43 dB (7.1 mV) ± 3 dB
- Output impedance at 1 kHz
 - 1.8 k Ω $\pm 30\%$ (unbalanced)
- Maximum input sound pressure level (0 dB SPL=2E-5 Pa)
 - 110.2 dB SPL
- Connector type
 - SMC9-4P
- Cable length
 - 1.4 m (4.5 feet)
- Dimensions Boom:
 - $\varnothing 3$ x 140 mm (5 5/8 inches)
- Mass
 - 15 g (0.5 oz) excluding cable



ECM-322BMP Electret Condenser Microphone

Features

- Supplied with 3-pole mini-jack with a stable lock mechanism for use with the UWP series bodypack transmitter
- Optimum sound pickup
- Ear-clip style
- Adjustable microphone position
- Secure and comfortable fit
- Compact and lightweight design

Supplied Accessories

- Operating instructions (1)
- Carrying case (1)

Specifications

- Capsule type
 - Electret Condenser
- Frequency response
 - 70 Hz to 15 kHz
- Directivity
 - Omni-directional
- Sensitivity (0 dB=1 V/Pa, at 1 kHz)
 - 43 dB (7.1 mV) ± 3 dB
- Output impedance at 1 kHz
 - 1.8 k Ω $\pm 30\%$ (unbalanced)
- Maximum input sound pressure level (0 dB SPL=2E-5 Pa)
 - 110.2 dB SPL
- Connector type
 - 3-pole mini-jack
- Cable length
 - 1.4 m (4.5 feet)
- Dimensions Boom:
 - $\varnothing 3$ x 140 mm (5 5/8 inches)
- Mass
 - 15 g (0.5 oz) excluding cable



ECM-44B Lavalier Microphone

Features

- Omni-directional, electret condenser microphone
- Superior sound quality •Complete with in-line battery unit
- Microphone head: 8.5 mm dia. x 14.5 mm (11/32 inch dia. x 19/32 inch), 2g (0.07 oz) •Microphone cable length: 3.0 m (9.8 feet)

Supplied Accessories

Holder clip (single/horizontal type) (1)

Urethane wind screen (1)

Microphone case (1)

Optional Accessories

SAD-H44B Lavalier-Microphone Holder Clip

AD-R44B Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Frequency response:

40 Hz to 15 kHz

Directivity:

Omni-directional

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

-53.0 dB \pm 3 dB

Output impedance (at 1 kHz):

250 Ω \pm 20% (balanced)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

62 dB or more

Inherent noise:

32 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

122 dB SPL

Output connector:

XLR-3-12C type

Cable length:

3.0 m (9.8 feet)

Power supply:

R6 (1.5V) (R6P battery life: approx. 5,000 h)

Normal operating voltage:

DC 1.5 V

Current drain:

0.3 mA or less

Dimensions:

Microphone head:

8.5 mm dia. x 14.5 mm

(11/32 inch dia. x 19/32 inch)

Power unit:

20.0 mm dia. x 126 mm

(13/16 inch dia. x 5 inches)

Mass:

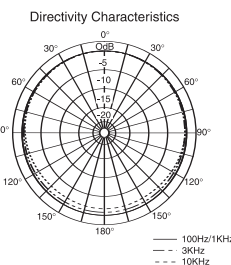
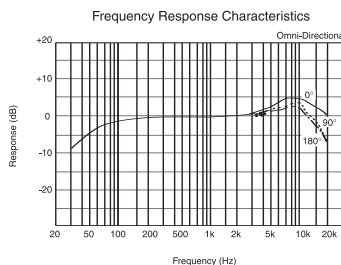
Microphone head:

2 g (0.07 oz)

Total:

121 g (4.3 oz)

*0 dB SPL = 2E-5 Pa.



ECM-44BC Lavalier Microphone

Features

- Omni-directional, electret condenser microphone
- Superior sound quality •SMC9-4P type connector for use with WRT-822A/822B/860A
- Microphone head: 8.5 mm dia. x 14.5 mm (11/32 inch dia. x 19/32 inch), 2g (0.07 oz)
- Microphone cable length: 1.2 m (3.9 feet)



Applicable Models

WRT-8B UHF Synthesised Transmitter
(6668U)

Supplied Accessories

Holder clip (single/horizontal type) (1)
Urethane wind screen (1)
Microphone case (1)

Optional Accessories

SAD-H44B Lavalier-Microphone Holder Clip
AD-R44B Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Frequency response:

40 Hz to 15 kHz

Directivity:

Omn-directional

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

-40 dB (10 mV)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

62 dB or more

Inherent noise:

32 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

122 dB SPL

Output connector:

SMC9-4P type

Cable length:

1.2 m (3.9 feet)

Normal operating voltage:

DC 3 V (supply range: DC 3 to 10 V)

Current drain:

0.3 mA or less

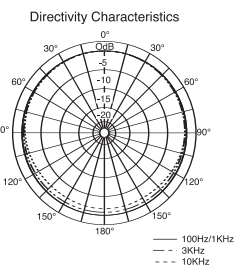
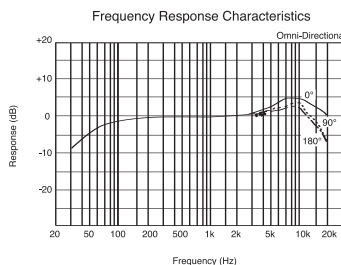
Dimensions (microphone head):

8.5 mm dia. x 14.5 mm
(11/32 inch dia. x 19/32 inch)

Mass (microphone head):

2 g (0.07 oz)

*0 dB SPL = 2E-5 Pa.



ECM-44BMP Lavalier Microphone

Features

- Omni-directional, electret condenser microphone
- Superior sound quality •3.5 mm dia., 3-pole mini plug for use with WRT-805A/805B •Microphone head: 8.5 mm dia. x 14.5 mm (11/32 inch dia. x 19/32 inch), 2g (0.07 oz)
- Microphone cable length: 1.2 m (3.9 feet)

Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Urethane wind screen (1)
- Microphone case (1)

Optional Accessories

- SAD-H44B Lavalier-Microphone Holder Clip
- AD-R44B Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Frequency response:

40 Hz to 15 kHz

Directivity:

Omni-directional

Sensitivity (0 dB = 1 V/Pa, at 1 kHz):

-40 dB (10 mV)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

62 dB or more

Inherent noise:

32 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

122 dB SPL

Output connector:

3.5 mm dia., 3-pole mini plug

Cable length:

1.2 m (3.9 feet)

Normal operating voltage:

DC 3 V (supply range: DC 3 to 10 V)

Current drain:

0.3 mA or less

Dimensions (microphone head):

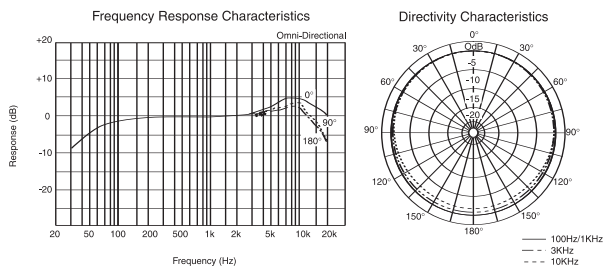
8.5 mm dia. x 14.5 mm

(11/32 inch dia. x 19/32 inch)

Mass (microphone head):

2 g (0.07 oz)

*0 dB SPL = 2E-5 Pa.



ECM-530 Electret Condenser Microphone

Features

- Compact and high-quality table-top microphone
- Goose-neck and extendable stem allow flexible microphone positioning for precise voice pick-up
- 2-way powering: internal AA-size battery or external power supply (DC 12 to 48 V)

Supplied Accessories

- Operation manual (1)
- Wind screen (1)

Specifications

Capsule type:

Electret condenser

Frequency response:

70 Hz to 18 kHz

Directivity:

Uni-directional

Effective output level at 1 kHz

(0 dBm = 1 mW/1 Pa.):

-46.8 dBm

Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):

-49.0 dB \pm 3.0 dB

Output impedance at 1 kHz (balanced):

150 Ω \pm 20%

Dynamic range:

95 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

63 dB or more

Inherent noise:

31 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Wind noise:

55 dB SPL or less

Max. Input sound pressure level:

126 dB SPL

Microphone connector:

XLR-3-12C type

Cable length:

2 m

Available receptacle:

XLR-3-11C type

Power supply:

Battery power (R6 or LR6) or external power supply (AC-148F or equivalent)

Recommended Sony battery:

R6P (R6P battery life: approx. 5,000 h)

Standard operating voltage:

Battery: 1.5 V

External power: DC 24 to 48 V

Current drain:

Battery: 0.23 mA or less

AC power: 2 mA or less

Dimensions:

12 dia. x 326 to 448 mm

86 dia. mm (Table Stand)

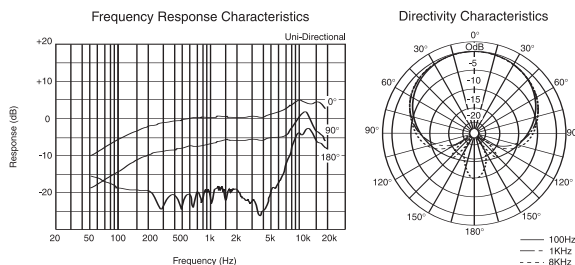
(1/2 dia. x 12 7/8 to 17 3/8 inches)

(Table stand: 3 1/2 dia. inches)

Mass (without battery):

325 g (11.5 oz)

*0 dB SPL = 2E-5 Pa.



ECM-55B Lavalier Microphone

Features

- Omni-directional, electret condenser microphone
- Complete with in-line battery unit for 2-way powering (AA-size battery or external power supply (DC 12 to 48 V))
- Frequency response tailored for enhanced presence and improved voice quality in lavalier applications
- Microphone head: 10.6 mm dia. x 21 mm (7/16 inch dia. x 27/32 inch), 6.5 g (0.2 oz)
- Mic cable length: 3.0 m (9.8 feet)



Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Holder clip (single/vertical type) (1)
- Metal wind screen (1)
- Microphone case (1)

Optional Accessories

- AD-R55B Metal Windscreen
- SAD-H55B Lavalier-Microphone Holder Clip

Power unit:

20.0 mm dia. x 133 mm
(13/16 inch dia. x 5 1/4 inches)

Mass:

Microphone head:
6.5 g (0.23 oz)
Total (without power unit):
127 g (4.5 oz)

Specifications

Capsule type:

Electret condenser

Frequency response:

30 Hz to 18 kHz

Directivity:

Omni-directional

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-52.0 dB \pm 2 dB

Output impedance (at 1 kHz):

100 Ω \pm 20% (balanced)

Dynamic range:

98 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

66 dB or more

Inherent noise:

28 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

126 dB SPL

Output connector:

XLR-3-12C type

Cable length:

3.0 m (9.8 feet)

Power supply:

Battery:

R6 (1.5 V) (R6P battery life: approx.
5,000 h)

Ext. power:

DC 12 to 48 V

Normal operating voltage:

DC 1.5 V

Current drain:

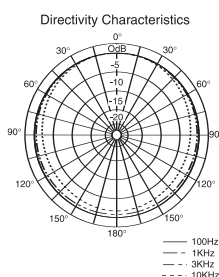
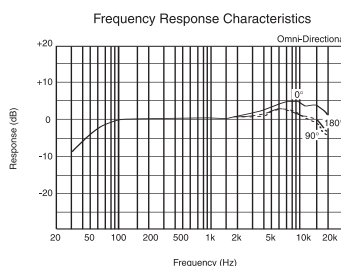
3.5 mA or less

Dimensions:

Microphone head:

10.6 mm dia. x 21 mm
(7/16 inch dia. x 27/32 inch)

*0 dB SPL = 2E-5 Pa.



ECM-66B Lavalier Microphone

Features

- Designed for instrumental applications
- Uni-directional electret condenser microphone
- Complete with in-line battery unit for 2-way powering (AA-size battery or external power supply (DC 24 to 48 V))
- Max. 130 dB SPL input sound pressure level
- Microphone head: 10.6 mm dia. x 24.3 mm (7/16 inch dia. x 31/32 inch), 7 g (0.24 oz)
- Mic cable length: 3.0 m (9.8 feet)



Supplied Accessories

Holder clip (single/horizontal type) (1)
 Holder clip (single/vertical type) (1)
 Urethane wind screen (1)
 Microphone case (1)

Optional Accessories

AD-R66B Urethane Windscreen
 SAD-H55B Lavalier-Microphone Holder Clip

Power unit:

20.0 mm dia. x 163 mm
 (13/16 inch dia. x 6 2/1 inches)

Mass:

Microphone head:
 7 g (0.25 oz)
 Total (without power unit):
 167 g (5.9 oz)

Specifications

Capsule type:

Electret condenser

Directivity:

Uni-directional

Frequency response:

70 Hz to 14 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-50.0 dB \pm 2 dB

Output impedance (at 1 kHz):

100 Ω \pm 20% (balanced)

Dynamic range:

101 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

65 dB or more

Inherent noise:

29 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

50 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

130 dB SPL

Output connector:

XLR-3-12C type

Cable length:

3.0 m (9.8 feet)

Power supply:

Battery:

R6 (1.5 V) (R6P battery life: approx.
 300 h)

Ext. power:

DC 24 to 48 V

Normal operating voltage:

DC 1.5 V

Current drain:

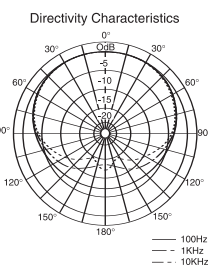
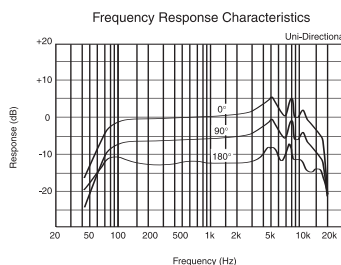
0.3 mA or less

Dimensions:

Microphone head:

10.6 mm dia. x 24.2 mm
 (7/16 inch dia. x 31/32 inch)

*0 dB SPL = 2E-5 Pa.



ECM-673 Electret Condenser Microphone

Features

- Shotgun-type electret condenser microphone
- Super-cardioid microphone with minimum sensitivity to ambient noise
- Compact and light weight design
- Suitable for mounting on Sony cameras and camcorders
- External power supply (DC 40 to 52 V)

Supplied Accessories

- Wind screen (1)
- Microphone holder (1)
- Microphone spacer (1)
- Microphone cable (1)
- Operating instructions (1)

Specifications

Capsule type

Electret condenser

Directivity

Uni-directional (super-cardioid)

Frequency response

40 Hz to 20 kHz

Sensitivity (at 1 kHz)

-36 dB¹ ±3 dB

Output impedance (at 1 kHz)

220 Ω ±20%

Dynamic range

107 dB or more

Signal-to-noise ratio

77 dB or more (IEC179 A-weighted,
1 kHz, 1Pa)

Inherent noise

17 dB SPL² or less

Wind noise

45 dB SPL² or less (with windscreen),

50 dB SPL² (without windscreen)

Induction noise from external magnetic field

0 dB SPL² or less

Maximum input sound pressure level

124 dB SPL²

Power requirements

DC 40 to 52 V

Dimensions

ø20 x 200 mm

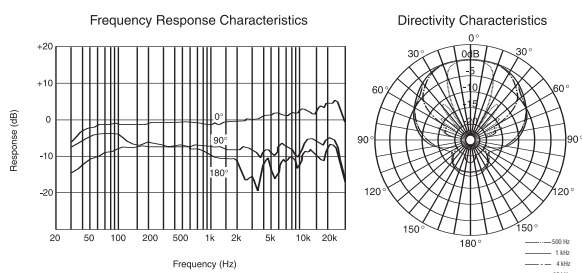
(ø13/16 x 7 7/8 inches)

Mass Approx.

135 g (4.76 oz)

¹ 0 dB=1 V/Pa, at 1 kHz

² 0 dB=20μ Pa



ECM-674 Electret Condenser Microphone

Features

- Superior sound quality with a newly developed microphone capsule
- Excellent sensitivity of -36 dB (0 dB=1 V/Pa.)
- Low inherent-noise level of less than 17 dB SPL
- Flat-and-wide frequency response (40 Hz to 20 kHz)
- Compact and lightweight design - 268 mm in length and 185 g weight
- Two-way powering - Internal AA-size battery operation or External DC (40 to 52 V) operation
- Built-in low cut filter switch (M, V) for reducing undesired ambient noise
- Built-in battery liquid leakage protection circuit

Supplied Accessories

Windscreen (1)
Microphone holder (1)
Microphone spacer (1)
Microphone cable (1)
Operating instructions (1)

Applicable Models

DVW-970P Digital Betacam Camcorder
DVW-970 Digital Betacam Camcorder
MSW-970P MPEG IMX Camcorder
MSW-970 MPEG IMX Camcorder

Specifications

Capsule type
Electret condenser

Directivity
Uni-directional (super-cardioid)

Frequency response
40 Hz to 20 kHz

Sensitivity (at 1 kHz)
36 dB^(*) ±3 dB

Output impedance (at 1 kHz)
220 Ω ±20%

Dynamic range
Phantom: 107 dB or more,
Battery: 98 dB or more

Signal-to-noise ratio
77 dB or more
(IEC179 A-weighted, 1 kHz, 1Pa.)

Inherent noise
17 dB SPL^(*) or less

Wind noise
50 dB SPL^(*) or less (with windscreen)

Induction noise from external magnetic field
0 dB SPL^(*) or less

Maximum input sound pressure level
Phantom: 124 dB SPL^(*),
Battery: 115 dB SPL^(*)

Power requirements
External: DC 40 to 52 V, Battery: 1.5 V

Dimensions
20 dia. x 268 mm
(13/16 dia. x 10 5/8 inches)

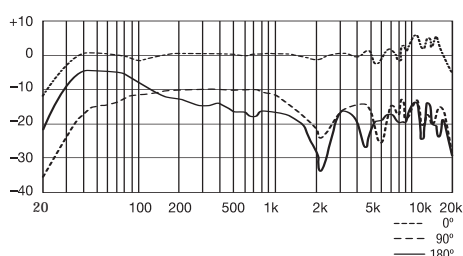
Mass
Approx. 185 g (6.5 oz) without battery
Approx. 208 g (7.3 oz) with battery

(*) 1) 0 dB=1 V/Pa., at 1 kHz

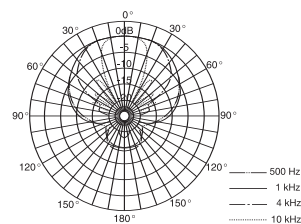
(*) 2) 0 dB=20μ Pa.



Frequency Response Characteristics



Directivity Characteristics



ECM-678 Electret Condenser Microphone.

Features

- Shotgun-type electret condenser microphone
- Superior sound quality
- Flat and wide frequency response
- Compact design
- Built-in low cut filter
- High durability and reliability
- Suitable for mounting on Sony cameras and camcorders

Supplied Accessories

- Windscreen (x1)
- Microphone holder (x1)
- Microphone spacer (x1)
- Carrying case (x1)
- Operating instructions (x1)

Specifications

Capsule type

Electret condenser

Directivity

Uni-directional (Super-cardioid)

Frequency response

40 Hz to 20 kHz

Sensitivity (at 1 kHz)

-28 dB¹ ±3 dB

Output impedance (at 1 kHz)

200 Ω ±20%

Dynamic range

111 dB or more

Signal-to-noise ratio

78 dB or more

(IEC179 A-weighted, 1 kHz, 1Pa.)

Inherent noise

16 dB SPL² or less

Wind noise

60 dB SPL² or less

Induction noise from external magnetic field

0 dB SPL² or less

Maximum input sound pressure level

127 dB SPL²

Power requirements

External, DC 48 V ±4 V

Dimensions

ø20 x 250 mm (ø13/16 x 9 7/8 inches)

Mass

200 g (7 oz)

¹1 0 dB=1 V/Pa., at 1 kHz

²2 0 dB SPL=20μ Pa.



ECM-77B Lavalier Microphone

Features

- High performance, ultra miniature microphone
- Omni-directional, electret condenser microphone
- Microphone head: approx. 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch), 1.5 g (0.04 oz)
- Frequency response: 40 Hz to 20 kHz
- Complete with in-line battery unit for 2-way powering (AA-size battery or external power supply (DC 12 to 48 V))
- Mic cable length: 3.0 m (9.8 feet)



Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Holder clip (single/vertical type) (1)
- Metal wind screen (1)
- Microphone case (1)

Optional Accessories

- AD-KIT77 Lavalier-Microphone Accessory Kit
- SAD-H77B Lavalier-Microphone Holder Clip
- SAD-W77B Lavalier-Microphone Holder Clip
- SAD-V77B Lavalier-Microphone Holder Clip
- AD-C77B Urethane Windscreen
- AD-R77B Metal Windscreen
- AD-C77 Colour Urethane Windscreen

Current drain:

0.4 mA or less

Dimensions:

Microphone head:

5.6 mm dia. x 12.5 mm
(1/4 inch dia. x 1/2 inch)

Power unit:

20.0 mm dia. x 133 mm
(13/16 inch dia. x 5 1/4 inches)

Mass:

Microphone head:

1.5 g (0.05 oz)

Total:

122 g (4.3 oz)

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

40 Hz to 20 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-52.0 dB \pm 2 dB

Output impedance (at 1 kHz):

150 Ω \pm 20% (balanced)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

64 dB or more

Inherent noise:

30 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

120 dB SPL

Output connector:

XLR-3-12C type

Cable length:

3.0 m (9.8 feet)

Power supply:

Battery:

R6 (1.5 V) (R6P battery life: approx.
5,000 h)

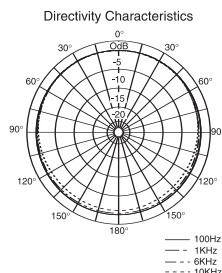
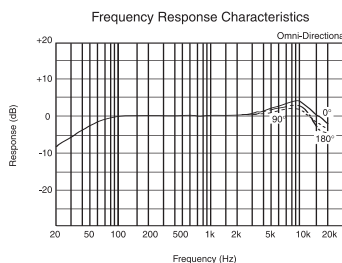
Ext. power:

DC 12 to 48 V

Normal operating voltage:

DC 1.5 V

*0 dB SPL = 2E-5 Pa.



ECM-77BC Lavalier Microphone

Features

- High performance, ultra miniature microphone
- Omni-directional, electret condenser microphone
- Frequency response: 40 Hz to 20 kHz
- Microphone head: approx. 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch), 1.5 g (0.04 oz)
- 1.2 m (3.9 feet) cable terminating in a SMC9-4P type connector for use with WRT-822A/822B/860A



Applicable Models

WRT-8B UHF Synthesised Transmitter

Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Holder clip (single/vertical type) (1)
- Metal wind screen (1)
- Microphone case (1)

Optional Accessories

- AD-KIT77 Lavalier-Microphone Accessory Kit
- SAD-H77B Lavalier-Microphone Holder Clip
- SAD-W77B Lavalier-Microphone Holder Clip
- SAD-V77B Lavalier-Microphone Holder Clip
- AD-C77B Urethane Windscreen
- AD-R77B Metal Windscreen
- AD-C77 Colour Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

40 Hz to 20 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-39.0 dB (11.2 mV)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

64 dB or more

Inherent noise:

30 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

120 dB SPL

Output connector:

SMC9-4P type

Cable length:

1.2 m (3.9 feet)

Normal operating voltage:

DC 3 V (supply range: 3 to 10 V)

Current drain:

0.4 mA or less

Dimensions:

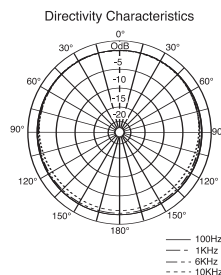
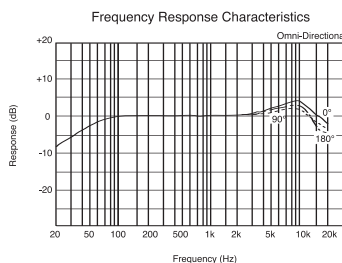
Microphone head:

5.6 mm dia. x 12.5 mm
(1/4 inch dia. x 1/2 inch)

Mass (microphone head):

1.5 g (0.05 oz)

*0 dB SPL = 2E-5 Pa.



ECM-77BMP Lavalier Microphone

Features

- High performance, ultra miniature microphone
- Omni-directional, electret condenser microphone
- Frequency response: 40 Hz to 20 kHz •Microphone head: approx. 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch), 1.5 g (0.04 oz) •1.2 m (3.9 feet) cable terminating in a 3.5 mm dia., 3-pole mini plug for use with WRT-805A/805B



Supplied Accessories

- Holder clip (single/horizontal type) (1)
- Holder clip (single/vertical type) (1)
- Metal wind screen (1)
- Microphone case (1)

Optional Accessories

- AD-KIT77 Lavalier-Microphone Accessory Kit
- SAD-H77B Lavalier-Microphone Holder Clip
- SAD-W77B Lavalier-Microphone Holder Clip
- SAD-V77B Lavalier-Microphone Holder Clip
- AD-C77B Urethane Windscreen
- AD-R77B Metal Windscreen
- AD-C77 Colour Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

40 Hz to 20 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-39.0 dB (11.2 mV)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

64 dB or more

Inherent noise:

30 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

120 dB SPL

Output connector:

3.5 mm dia., 3-pole mini plug

Cable length:

1.2 m (3.9 feet)

Normal operating voltage:

DC 3 V (supply range: 3 to 10 V)

Current drain:

0.4 mA or less

Dimensions:

Microphone head:

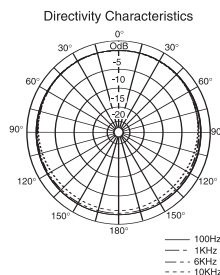
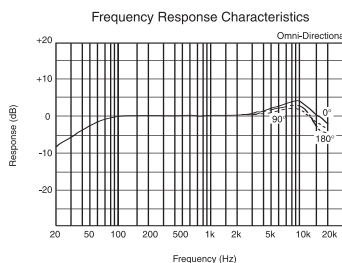
5.6 mm dia. x 12.5 mm

(1/4 inch dia. x 1/2 inch)

Mass (microphone head):

1.5 g (0.05 oz)

*0 dB SPL = 2E-5 Pa.



ECM-77BPT Lavalier Microphone

Features

- High performance, ultra miniature microphone
- Omni-directional, electret condenser microphone
- Frequency response: 40 Hz to 20 kHz •Pigtail connection, without battery unit or connector
- Microphone head: approx. 5.6 mm dia. x 12.5 mm (1/4 inch dia. x 1/2 inch), 1.5 g (0.04 oz)
- Mic cable length: 3.0 m (9.8 feet)

Supplied Accessories

Holder clip (single/horizontal type) (1)
Holder clip (single/vertical type) (1)
Metal wind screen (1)
Microphone case (1)

Optional Accessories

AD-KIT77 Lavalier-Microphone Accessory Kit
SAD-H77B Lavalier-Microphone Holder Clip
SAD-W77B Lavalier-Microphone Holder Clip
SAD-V77B Lavalier-Microphone Holder Clip
AD-C77B Urethane Windscreen
AD-R77B Metal Windscreen
AD-C77 Colour Urethane Windscreen

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

40 Hz to 20 kHz

Sensitivity (0 dB=1 V/Pa, at 1 kHz):

-39.0 dB (11.2 mV)

Dynamic range:

90 dB or more

Signal-to-noise ratio (A-weighted, 1 kHz,

1 Pa.):

64 dB or more

Inherent noise:

30 dB SPL or less

Wind noise (with wind screen, at 2 m/s):

40 dB SPL or less

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Max. input sound pressure level:

120 dB SPL

Cable length:

3.0 m (9.8 feet)

Normal operating voltage:

DC 3 V (supply range: 3 to 10 V)

Current drain:

0.4 mA or less

Dimensions:

Microphone head:

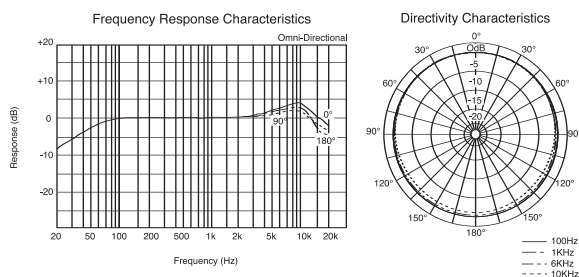
5.6 mm dia. x 12.5 mm

(1/4 inch dia. x 1/2 inch)

Mass (microphone head):

1.5 g (0.05 oz)

*0 dB SPL = 2E-5 Pa.



ECM-88B Lavalier Microphone

Features

The ECM-88B is an extremely miniature, omni-directional electret condenser microphone ideal for quality-critical applications in broadcasting, theatre, and field productions.

- Dual-diaphragm mechanism contributes to its high sensitivity and low inherent noise characteristics
- Water-resistant architecture
- Flat-and-wide frequency response: 20 Hz to 20 kHz
- Ultra-compact microphone capsule: 3.5 x 3.5 x 16.8 mm (5/32 x 5/32 x 11/16 inches)
- Supplied DC-78 DC Power Supply Unit enables two-way powering - internal AA-size (LR6) alkaline-battery operation or DC (12 to 48 V) operation
- Mic cable length: 2.5 m (8.2 feet)

Supplied Accessories

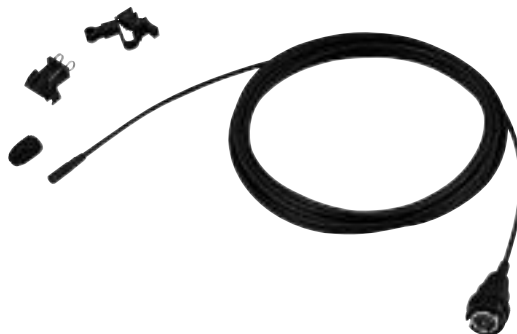
- Single/horizontal type tie clip (1)
- Single/vertical type tie clip (1)
- Double/horizontal type tie clip (1)
- Urethane windscreen (1)
- DC-78 (1)
- Microphone case (1)
- Ferrite clamp (1)
- Operating instructions (1)



ECM-88BC Lavalier Microphone

Features

- Ultra miniature, omni-directional electret condenser microphone
- Designed for use in broadcasting, theatre, and field production applications
- Dual-diaphragm mechanism contributes to its high sensitivity and low inherent noise characteristics
- Water-resistant architecture
- Flat-and-wide frequency response: 20 Hz to 20 kHz
- Microphone head: 3.5 mm x 3.5 mm x 16.8 mm (5/32 x 5/32 x 11-16 inch)
- 2.5 m (8.2 feet) cable with a Sony 4-pin connector (SMC9-4P) for connection to the optional DC-78 power supply unit or the WRT-8B/822A/822B bodypack transmitter



Supplied Accessories

Carrying case (1)
Microphone holder (double-pin type) (1)
Microphone holder (tie-clip type) (1)
Urethane windscreen (1)

*10 dB = 1V/Pa., at 1 kHz

**0 dB SPL = 20μ Pa.

ECM-88 with supplied accessories

Optional Accessories

AD-KIT88 Lavalier-Microphone Accessory Kit
AD-C88 Colour Urethane Windscreen
AD-R88B Urethane Windscreen
SAD-88B Lavalier-Microphone Holder Clip
SAD-P88 Lavalier-Microphone Holders
SAD-W88B Lavalier-Microphone Holder Adaptor
DC-78 Power Supply Unit

Specifications

Capsule type:

Electret condenser

Directivity:

Omni-directional

Frequency response:

20 Hz to 20 kHz

Sensitivity (at 1 kHz):

-52 dB* ±2 dB (when used in combination with the DC-78)
-38 dB* (12.6 mV)

Output impedance (at 1 kHz):

100 Ω ±20% (when used in combination with the DC-78)
2.5 kΩ ±30%

Dynamic range:

99 dB or more

Signal-to-noise ratio:

68 dB or more (A-weighted, 1 kHz, 1Pa.)

Inherent noise:

26 dB SPL** or less (A-weighted, 1 kHz, 1Pa.)

Wind noise:

45 dB SPL** or less (when using the supplied windscreen)

Induction noise from external magnetic field:

5 dB SPL** or less (when used in combination with the DC-78)

Maximum input sound pressure level:

125 dB SPL**

Cable length:

2.5 m (8.2 feet)

Output connector:

Sony SMC9-4P

Power requirements:

DC 1.1 to 10.0 V

Dimensions (microphone capsule):

3.5 x 3.5 x 16.8 (h) mm
(5/32 x 5/32 x 11/16 inch)

Mass:

32 g (including microphone cable)

ECM-88BPT Lavalier Microphone

Features

- Ultra miniature, omni-directional electret condenser microphone
- Designed for use in broadcasting, theatre, and field production applications
- Dual-diaphragm mechanism contributes to its high sensitivity and low inherent noise characteristics
- Water-resistant architecture
- Flat-and-wide frequency response: 20 Hz to 20 kHz
- Microphone head: 3.5 mm x 3.5 mm x 16.8 mm (5/32 x 5/32 x 11-16 inch)
- 2.5 m (8.2 feet) cable without a connector (pig tail)

Supplied Accessories

Microphone holder (double-pin type) (1)
Microphone holder (tie-clip type) (1)
Urethane windscreen (1)
Operating instructions (1)

Optional Accessories

AD-KIT88 Lavalier-Microphone Accessory Kit
SAD-88B Lavalier-Microphone Holder Clip
SAD-P88 Lavalier-Microphone Holders
SAD-W88B Lavalier-Microphone Holder
Adaptor
AD-C88 Colour Urethane Windscreen
AD-R88B Urethane Windscreen

Specifications

Capsule type:
Electret condenser
Directivity:
Omni-directional

Frequency response:

20 Hz to 20 kHz
Sensitivity (at 1 kHz):
-38 dB* (12.6 mV)
Output impedance (at 1 kHz):
2.5 k Ω \pm 30%
Dynamic range:
99 dB or more
Signal-to-noise ratio:
68 dB or more (A-weighted, 1 kHz, 1Pa.)
Inherent noise:
26 dB SPL** or less (A-weighted, 1 kHz, 1Pa.)
Wind noise:
45 dB SPL** or less (when using the supplied windscreen)
Induction noise from external magnetic field:
5 dB SPL** or less (when used in combination with the DC-78)

Maximum input sound pressure level:

125 dB SPL**
Cable length:
2.5 m (8.2 feet)
Output connector:
No connector (pig tail)
Power requirements:
DC 1.1 to 10.0 V
Dimensions (microphone capsule):
3.5 x 3.5 x 16.8 (h) mm
(5/32 x 5/32 x 11/16 inch)
Mass:
20 g (including microphone cable)

*10 dB = 1V/Pa., at 1 kHz ** 0 dB SPL = 20 μ Pa.



ECM-88FPT Lavalier Microphone

Features

- Ultra miniature, omni-directional electret condenser microphone
- Designed for use in broadcasting, theatre, and field production applications
- Dual-diaphragm mechanism contributes to its high sensitivity and low inherent noise characteristics
- Water-resistant architecture
- Flat-and-wide frequency response: 20 Hz to 20 kHz
- Beige colour
- Microphone head: 3.5 mm x 3.5 mm x 16.8 mm (5/32 x 5/32 x 11-16 inch)
- 2.5 m (8.2 feet) cable without a connector

Specifications

Capsule type:
Electret condenser
Directivity:
Omni-directional
Frequency response:
20 Hz to 20 kHz
Sensitivity (at 1 kHz):
-38 dB* (12.6 mV)
Output impedance (at 1 kHz):
2.5 k Ω \pm 30%
Dynamic range:
99 dB or more
Signal-to-noise ratio:
68 dB or more (A-weighted, 1 kHz, 1Pa.)
Inherent noise:
26 dB SPL** or less (A-weighted, 1 kHz, 1Pa.)

Wind noise:

45 dB SPL** or less (when using the supplied windscreen)
Induction noise from external magnetic field:
5 dB SPL** or less (when used in combination with the DC-78)
Maximum input sound pressure level:
125 dB SPL**
Cable length:
2.5 m (8.2 feet)
Output connector:
No connector (pigtail)
Power requirements:
DC 1.1 to 10.0 V
Dimensions (microphone capsule):
3.5 x 3.5 x 16.8 (h) mm
(5/32 x 5/32 x 11/16 inch)

Mass:

32 g (including microphone cable)

*10 dB = 1V/Pa., at 1 kHz ** 0 dB SPL = 20 μ Pa.



F-112 Dynamic Microphone

Features

•Superior sound quality •Flat-and-wide frequency response •Robust and sophisticated design

Supplied Accessories

Operating instructions (1)

Optional Accessories

UWP-C3 UHF Synthesised Wireless

Microphone Package (62CE7)

UWP-C3 UHF Synthesised Wireless

Microphone Package (67CE7)

Specifications

Capsule type

Dynamic

Directivity

Omni-directional

Frequency response

60 Hz to 18 kHz

Sensitivity (at 1 kHz)

52 dB^(*) ± 3 dB

Output impedance (at 1 kHz)

400 Ω $\pm 20\%$

Dimensions

22/41.4 dia. x 190 mm (7/8 dia. (handle),

1 11/16 dia. (head) x 8 3/4 inches))

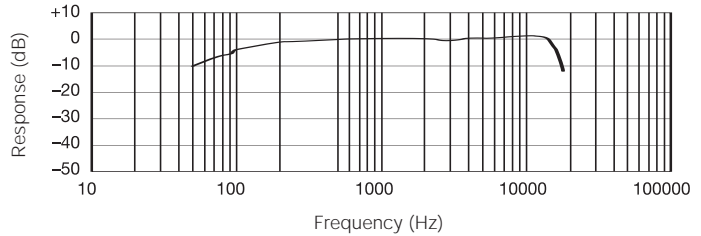
Mass

Approx. 215 g (7.6 oz)

(*) 0 dB=1 V/Pa., at 1 kHz



Frequency Response Characteristics



F-710 Dynamic Microphone

Features

- For multi-purpose applications •Built-in TALK switch
- High sensitivity with the Neodymium magnet •XLR-3-12C type connector •Frequency response: 70 Hz to 15 kHz
- Dimensions (diameter x length): 54 x 177 mm (2 1/4 x 7 inches) •Mass: approx. 250 g (8.8 oz)



Supplied Accessories

- Microphone holder (1)
- Stand adaptor (NS/8) (1)
- Stand adaptor (W3/8) (1)

Optional Accessories

- SAD-700 Microphone Holder
- A-12 Table Stand
- A-25 Table Stand
- A-25N Table Stand
- CRS-3P Cradle Suspension

Specifications

Capsule type:

Dynamic

Frequency response:

70 Hz to 15 kHz

Directivity:

Uni-directional

Effective output level at 1 kHz (0 dBm =

1 mW/1 Pa.):

-56.0 dBm

Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):

-54.0 dB \pm 3.0 dB

Output impedance at 1 kHz (balanced):

400 Ω \pm 20%

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Wind noise:

55 dB SPL or less

Microphone connector:

XLR-3-12C type

Available receptacle:

XLR-3-11C type

Stand screw/mic holder screw:

PF1/2-inch thread

Dimensions (diameter x length):

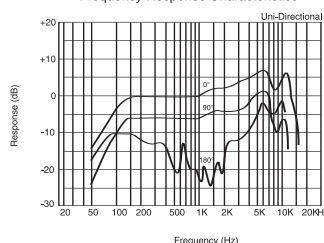
54 x 177 mm (2 1/4 x 7 inches)

Mass:

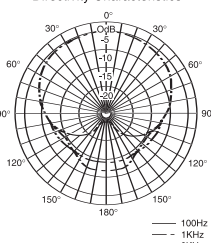
250 g (8.8 oz)

* 0 dB SPL = 2E-5 Pa.

Frequency Response Characteristics



Directivity Characteristics



F-720 Dynamic Microphone

Features

- For multi-purpose applications •Convenient TALK switch for turning on and off the microphone •Vibration proof capsule suspension •XLR-3-12C type connector
- Frequency response: 50 Hz to 13 kHz •Dimensions: 37.6 dia. x 160 mm (1 1/2 dia. x 6 3/8 inches)
- Mass: approx. 260 g (9.2 oz)



Supplied Accessories

- Microphone holder (1)
- Stand adaptor (NS5/8) (1)
- Stand adaptor (W3/8) (1)

Optional Accessories

- A-12 Table Stand
- A-25 Table Stand
- A-25N Table Stand
- CRS-3P Cradle Suspension

Specifications

Capsule type:

Dynamic

Frequency response:

50 Hz to 13 kHz

Directivity:

Uni-directional

Effective output level at 1 kHz (0 dBm =

1 mW/1 Pa.):

-60.0 dBm

Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):

-57.0 dB \pm 3.0 dB

Output impedance at 1 kHz (balanced):

500 Ω \pm 20%

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

10 dB SPL or less

Wind noise:

55 dB SPL or less

Microphone connector:

XLR-3-12C type

Available receptacle:

XLR-3-11C type

Stand screw/mic holder screw:

PF1/2-inch thread

Dimensions (diameter x length):

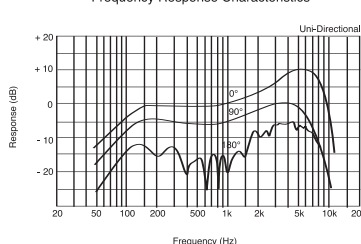
37.6 x 160 mm (1 1/2 x 6 3/8 inches)

Mass:

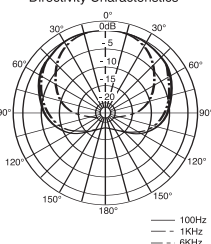
260 g (9.2 oz)

* 0 dB SPL = 2E-5 Pa.

Frequency Response Characteristics



Directivity Characteristics



F-780 Dynamic Microphone

Features

- Designed specifically for critical vocal reproduction in music recording and live performance
- Rugged capsules in a resilient body structure
- Special AlNiCo Magnet
- High quality edgewise winding CCAW (Copper Clad Aluminium Wire) voice coil
- XLR-3-12C type connector
- Frequency response: 50 Hz to 18 kHz
- Dimensions: 51 dia. x 165 mm (2 1/8 dia. x 6 1/2 inches)
- Mass: approx. 290 g (10.2 oz)



Supplied Accessories

- Microphone holder (1)
- Stand adaptor (NS5/8) (1)
- Stand adaptor (W3/8) (1)

Specifications

Capsule type:

Dynamic

Frequency response:

50 Hz to 18 kHz

Directivity:

Uni-directional

Effective output level at 1 kHz (0 dBm =

1 mW/1 Pa.):

-55.0 dBm

Sensitivity (0 dB = 1 V/1 Pa., at 1 kHz):

-53.0 dB \pm 2.0 dB

Output impedance at 1 kHz (balanced):

400 Ω \pm 20%

Induction noise from external magnetic field

(dB SPL/(1E-7) T):

5 dB SPL or less

Wind noise:

50 dB SPL or less

Microphone connector:

XLR-3-12C type

Available receptacle:

XLR-3-11C type

Stand screw/mic holder screw:

PF1/2-inch thread

Dimensions (diameter x length):

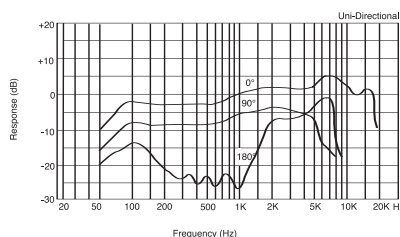
51 x 165 mm (1 1/8 x 6 1/2 inches)

Mass:

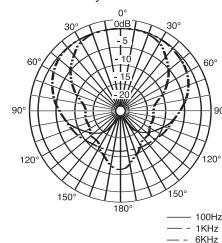
290 g (10.2 oz)

*0 dB SPL = 2E-5 Pa.

Frequency Response Characteristics



Directivity Characteristics



AD-KIT88B Microphone Accessory Kit

Features

The AD-KIT88B is a lavalier microphone accessory kit for the ECM-88 Series.

- Includes four types of microphone clips (single/horizontal, single/vertical, double/horizontal, and safety-pin type tie clip) and six urethane windscreens (red, yellow, green, blue, gray, and black)

Applicable Models

ECM-88B Lavalier Microphone
ECM-88BC Lavalier Microphone
ECM-88BPT Lavalier Microphone



SAD-H88B Lavalier-Microphone Holder Clip

Features

The SAD-H88B is a horizontal type lavalier microphone holder clip for the ECM-88 Series.

- Single/horizontal holder clip for the ECM-88 Series lavalier microphones
- Black colour
- Six pieces are included

Applicable Models

ECM-88B Lavalier Microphone
ECM-88BC Lavalier Microphone
ECM-88BPT Lavalier Microphone



SAD-V88B Lavalier-Microphone Holder Clip

Features

The SAD-V88B is a vertical type lavalier microphone holder clip for the ECM-88 Series.

- Single/vertical holder clip for the ECM-88 Series lavalier microphones
- Black colour
- Six pieces are included

Applicable Models

ECM-88B Lavalier Microphone
ECM-88BC Lavalier Microphone
ECM-88BPT Lavalier Microphone



SAD-W88BL Lavalier-Microphone Holder Clip

Features

The SAD-W88BL is a double/horizontal type lavalier microphone holder clip for the ECM-88 Series.

- Double/horizontal holder clip for the ECM-88 Series lavalier microphones
- Black colour
- Six pieces are included

Applicable Models

ECM-88B Lavalier Microphone
ECM-88BC Lavalier Microphone
ECM-88BPT Lavalier Microphone



SAD-S88B Lavalier-Microphone Holder Clip

Features

The SAD-S88B is a safety-pin type lavalier microphone holder clip for the ECM-88 Series.

- Safety-pin type holder clip for the ECM-88 Series lavalier microphones
- Black colour
- Six pieces are included

Applicable Models

ECM-88B Lavalier Microphone
ECM-88BC Lavalier Microphone
ECM-88BPT Lavalier Microphone



AD-KIT88 Lavalier-Microphone Accessory Kit

Features

- Designed for ECM-88 Series Lavalier microphones
- Includes two types of microphone holders (double-pin and tie-clip), a holder adaptor for dual-microphone operation, and six urethane windscreens (red, yellow, green, blue, gray, and black)

Applicable Models

ECM-88 Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



SAD-88B Lavalier-Microphone Holder Clip

Features

- Single, tie-clip type microphone holder for ECM-88 Series lavalier microphones
- Black colour
- Six pieces are included.

Applicable Models

ECM-88 Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



SAD-P88 Lavalier-Microphone Holders

Features

- Double-pin type microphone holder for ECM-88 Series lavalier microphones
- Black colour
- Six pieces are included.

Applicable Models

ECM-88 Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



SAD-W88B Lavalier-Microphone Holder Adaptor

Features

- Microphone holder adaptor for dual-microphone operation
- Used in combination with SAD-P88 or SAD-88B microphone holder
- Six pieces are included.

Applicable Models

ECM-88 Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



AD-R88B Urethane Windscreen

Features

- Single/horizontal holder clip for the ECM-77 Series lavalier microphones
- Black colour
- 10 pieces are included.

Applicable Models

ECM-88 Lavalier Microphone
ECM-88B Lavalier Microphone
ECM-88BC Lavalier Microphone
ECM-88BPT Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



AD-C88 Colour Urethane Windscreen

Features

- Designed for ECM-88 Series Lavalier microphones
- Two sets of the six colours (red, yellow, green, blue, gray, and black) are included.

Applicable Models

ECM-88 Lavalier Microphone
ECM-88FPT Lavalier Microphone
ECM-88PT Lavalier Microphone



AD-KIT77 Lavalier-Microphone Accessory Kit

Features

- Designed for ECM-77 Series Lavalier microphones
- Includes three types of microphone holders (horizontal/single type, vertical/single type, and horizontal/dual type) and six urethane windscreens (red, yellow, green, blue, gray, and black)

Applicable Models

ECM-77BC Lavalier Microphone
ECM-77BPT Lavalier Microphone



SAD-H77B Lavalier-Microphone Holder Clip

Features

•Single/horizontal holder clip for the ECM-77 Series lavalier microphones •Black colour •10 pieces are included.

Applicable Models

ECM-77B Lavalier Microphone
ECM-77BC Lavalier Microphone
ECM-77BMP Lavalier Microphone
ECM-77BPT Lavalier Microphone
ECM-88PT Lavalier Microphone



SAD-V77B Lavalier-Microphone Holder Clip

Features

•Single/vertical holder clip for the ECM-77 Series lavalier microphones •Black colour •10 pieces are included.

Applicable Models

ECM-77B Lavalier Microphone
ECM-77BC Lavalier Microphone
ECM-77BMP Lavalier Microphone
ECM-77BPT Lavalier Microphone



SAD-W77B Lavalier-Microphone Holder Clip

Features

•Double/vertical holder clip for the ECM-77 Series lavalier microphones •Black colour •Six pieces are included.

Applicable Models

ECM-77B Lavalier Microphone
ECM-77BC Lavalier Microphone
ECM-77BMP Lavalier Microphone
ECM-77BPT Lavalier Microphone



SAD-S77 Lavalier-Microphone Holder Clip

Features

•Safety pin-type holder clip for the ECM-77 Series lavalier microphones •Silver type •Six pieces are included.



AD-R77B Metal Windscreen

Features

- Designed for ECM-77 Series lavalier microphones
- Black colour •Six pieces are included.

Applicable Models

ECM-77B Lavalier Microphone
ECM-77BC Lavalier Microphone
ECM-77BMP Lavalier Microphone
ECM-77BPT Lavalier Microphone



AD-C77B Urethane Windscreen

Features

- Designed for ECM-77 Series lavalier microphones
- Black colour •12 pieces are included.

Applicable Models

ECM-77BC Lavalier Microphone
ECM-77BPT Lavalier Microphone



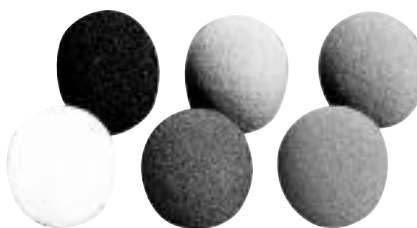
AD-C77 Colour Urethane Windscreen

Features

- Designed for ECM-77 Series lavalier microphones
- Two sets of the six colours (red, yellow, green, blue, gray, and black) are included.

Applicable Models

ECM-77B Lavalier Microphone
ECM-77BC Lavalier Microphone
ECM-77BMP Lavalier Microphone
ECM-77BPT Lavalier Microphone



AD-R66B Urethane Windscreen

Features

- Designed for ECM-66 Series lavalier microphones
- Black colour •12 pieces are included

Applicable Models

ECM-66B Lavalier Microphone
ECM-66BPT Lavalier Microphone

SAD-H55B Lavalier-Microphone Holder Clip

Features

- Single/horizontal holder clip for the ECM-55 Series and ECM-66 Series lavalier microphones
- Black colour
- 10 pieces are included.

Applicable Models

Applicable model

ECM-55B Lavalier Microphone

ECM-55BPT Lavalier Microphone

ECM-66B Lavalier Microphone

ECM-66BPT Lavalier Microphone



AD-R55B Metal Windscreen

Features

- Designed for ECM-55 Series lavalier microphones
- Black colour
- Six pieces are included.

Applicable Models

ECM-55B Lavalier Microphone

ECM-55BPT Lavalier Microphone



SAD-H44B Lavalier-Microphone Holder Clip

Features

- Single/horizontal holder clip for the ECM-44 Series lavalier microphones
- Black colour
- 10 pieces are included.

Applicable Models

ECM-44B Lavalier Microphone

ECM-44BC Lavalier Microphone

ECM-44BMP Lavalier Microphone

ECM-44BPT Lavalier Microphone



AD-R44B Urethane Windscreen

Features

- Designed for ECM-44 Series lavalier microphones
- Black colour
- 12 pieces are included.

Applicable Models

ECM-44B Lavalier Microphone

ECM-44BC Lavalier Microphone

ECM-44BMP Lavalier Microphone

ECM-44BPT Lavalier Microphone



SONY

Wireless Microphones

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WRU-806B/62	370
WRU-806B/67	370
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WRU-8N/67	371

AN-820A UHF Antenna

Features

- Built-in RF amplifier (10 dB gain)
- Easy installation on a wall or in a microphone stand with the supplied stand adaptor
- Used in pairs for diversity reception
- LED indication for installation check
- External power supply provided from the MB-806A, WRR-850A/840A/820A or the WD-820A/880A via coaxial cable

Applicable Models

MB-806A UHF Tuner Base Unit (758 MHz to 862 MHz)

Supplied Accessories

Wall Bracket (1)

Microphone Stand Bracket (1)



CU-E672 Capsule Unit

Features

- Hyper cardioid electret condenser microphone capsule
- A wide variety of applications in news-gathering, sports events and interviews
- The supplied windscreen reduces wind noise and popping

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter Unit

WRT-847B/67 UHF Synthesized Transmitter Unit

Supplied Accessories

Urethane windscreen (1)

Specifications

Directivity:

Uni-directional (hyper cardioid)

Frequency response:

50 Hz to 16 kHz

Max. sound pressure level:

120 dB

Dimensions:

φ37 x 172 mm

(φ1 1/2 x 6 7/8 inches)

Mass:

150 g (5.3 oz)



CU-E700 Capsule Unit

Features

- Electret condenser microphone capsule with super cardioid polar pattern
- Smooth frequency response for natural sound re-production
- Suitable for critical vocal and speech applications

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter Unit

WRT-847B/67 UHF Synthesized Transmitter Unit

Specifications

Directivity:

Uni-directional (super cardioid)

Frequency response:

50 Hz to 18 kHz

Max. sound pressure level:

150 dB

Dimensions:

φ51 x 98 mm

(φ2 1/8 x 3 7/8 inches)

Mass:

170 g (6 oz)



CU-F117 Capsule Unit

Features

- Dynamic microphone capsule with omni-directional polar pattern
- Superb rejection for wind noise and popping
- Designed for interview applications

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter Unit

WRT-847B/67 UHF Synthesized Transmitter Unit

Supplied Accessories

Urethane windscreen (1)

Specifications

Directivity:

Omni-directional

Frequency response:

50 Hz to 15 kHz

Dimensions:

φ44 x 105 mm

(φ1 3/4 x 4 1/4 inches)

Mass:

170 g (6 oz)



CU-F780 Capsule Unit

Features

- Dynamic microphone capsule with super cardioid polar pattern
- Uses the same high quality edgewise winding CCAW voice coil that is employed in the acclaimed Sony F-780 wired microphone
- Designed for vocal applications including live music performance

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter

Unit

WRT-847B/67 UHF Synthesized Transmitter

Unit

Specifications

Directivity:

Uni-directional (super cardioid)

Frequency response:

50 Hz to 18 kHz

Dimensions:

φ51 x 90 mm

(φ2 1/8 x 3 5/8 inches)

Mass:

180 g (6.3 oz)



CU-G780 Capsule Unit

Features

- Dynamic microphone capsule with super cardioid polar pattern
- Special design, based on the capsule of F-780 microphone, to cope with high sound pressure level vocals and incorporating outstanding feedback rejection
- Designed for vocal use

Applicable Models

WRT-847B/62 UHF Synthesized Transmitter

Unit

WRT-847B/67 UHF Synthesized Transmitter

Unit

Specifications

Directivity:

Uni-directional (super cardioid)

Frequency response:

50 Hz to 20 kHz

Dimensions:

φ51 x 90 mm

(φ2 1/8 x 3 5/8 inches)

Mass:

180 g (6.3 oz)



EC-1.5CF Microphone Cable

Features

- Fitted with an XLR-3-11 connector and SMC9-4P connector
- Allows a microphone with a 3-pin male XLR output connector to be connected to the WRT-822A/822B/8B bodypack transmitter
- Cable length: 1.5 m (4.9 feet)



K-1334 BMP-XLR Conversion Cable (balanced)

Features

- 3.5 mm dia. (5/32 inch dia.), 3-pole mini phone jack with a lock mechanism to XLR-3-12C type connector
- Designed for use with WRR-805A wireless portable tuner
- Cable length: 460 mm (1.5 feet)



MB-X6 UHF Tuner Base Unit (798 MHz to 822 MHz)

Features

- Modular design, 1U height 19-inch rack
- Accommodates up to six tuner modules for up to six simultaneous channels of operation
- Use of WD-850A allows further multi-channel operation
- Balanced XLR output connectors for each tuner and mix output
- RF input attenuator switch (10 dB/0 dB)
- Selectable output level: -58 dBm (for MIC) or -20 dBm (for LINE) at ± 5 kHz deviation at 1kHz modulation
- Auto channel assignment of additional receiver modules for instant programming of interference-free multi-channel operation. Automatically skips unusable channels and assigns clear channels.
- Supplied passive antennas for rear mounting (with provision for front mounting)



(Tuner modules are not included)



Supplied Accessories

Antenna (2)

AC power cord (1)

Optional Instructions

WD-850A UHF Antenna Divider

Specifications

Receiving frequency range:

798 MHz to 822 MHz

Audio output level:

-20 dBm/-58 dBm at reference deviation

Audio output connector:

XLR-3-32 (x 7, balanced)

Antenna attenuator level:

0 dB or 10 dB

Antenna connector:

BNC-R type (x 2), 50 Ω

Power requirements:

AC 230, 50/60 Hz

Power consumption:

30 W when accommodating six tuner modules

Power supply for antenna boosters:

DC 9 V (max. 100 mA)

Dimensions:

482 (W) x 44 (H) x 285 (D) mm

(19 x 1 3/4 x 11 1/4 inches)

Mass:

5.5 kg (12 lb 2 oz)

MB-8N Tuner Base Unit (CED)

Features

- Uses a modular design to accommodate up to four WRU-8N receiver modules. The built-in antenna divider allows up to four MB-8N tuner base units to be daisy-chained to form a 16-channel system.
- Wide system dynamic range: 116 dB (typical)
- PLL (Phase Locked Loop) frequency synthesized system
- Space diversity reception for dependable RF reception
- Advanced control settings from MB-8N front panel
- Headphone monitor jack on MB-8N front panel
- Selectable output level: Mic or Line level
- A D-sub 15-pin connector (unbalanced) for sub audio output
- Computer-based control over a simple Ethernet environment using supplied software
- Auto channel assignment of additional receiver modules for instant programming of interference-free multi-channel operation. Automatically skips unusable channels and assigns open channels.
- AC/DC (auto switch) operation
- Use of WD-880A antenna divider allows further multi-channel operation
- 1U high 19-inch rack mountable



(The WRU-8N tuner module is not included.)



Supplied Accessories

AC power code (1)
CD-ROM (contains operation instructions and supplied software) (1)

Optional Accessories

WRU-8N UHF Synthesized Tuner Unit (6264U)
WRU-8N UHF Synthesized Tuner Unit (6668U)

Specifications

MB-8N Tuner Base Unit

System dynamic range:

116 dB (typical)

Frequency response:

40 Hz to 20 kHz

Distortion:

1.0 % or less

Audio output level:

-20 dBm (LINE)/-58 dBm (MIC) at reference deviation

Audio output connector:

XLR-3-32 type (x 4), balanced

Sub-audio output connector:

D-sub 15-pin female, unbalanced

Antenna attenuator level:

0 dB, 5 dB, 10 dB or 15 dB

Antenna connector:

Inputs: BNC-R type (x 2), 50 Ω (nominal)

Outputs (for cascade connection): BNC-R type (x 2), 50 Ω (nominal)

Monitor output connector:

6.3 mm dia. stereo mini jack (x 1)

Monitor output level:

12 mW

Network connector:

RJ-45 (x 1), 10BASE-T

Power requirements:

AC 120 V, 50/60 Hz

DC 10 to 24 V

Power available for connected AN-820A

antennas:

9 V, max. 100 mA

Power consumption:

50 W when accommodating four WRU-8N tuner units

Dimensions (W x H x D):

482 x 44 x 300 mm

(19 x 1 3/4 x 11 7/8 inches)

Mass:

3.7 kg (8 lb 6 oz)

Supplied software for computer-based control

System requirements:

PC:

IBM PC/AT compatible

OS:

Windows 98SE/Windows 2000/

Windows Me/Windows NT 4.0 (ST6a)

Memory capacity:

128 MB RAM or more

CPU:

Intel Pentium 400 MHz or faster

Display:

1024 x 768 screen resolution or higher,

256 color display or higher

Network interface:

10/100 BASE-T Network interface card

Hard disc drive:

200 MB or more remaining, after MB-8N

supplied software and other

applications are installed.

UTX-P1/62 UHF Synthesized Transmitter (62CE7)

Features

- Plug-on transmitter designed for use with the UWP Series tuners
- Operates over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- Converts a wired microphone to a wireless microphone via an XLR connector
- Compact and lightweight body provides balanced handling
- Attenuator function allows adjustment of the microphone-input level
- Durable connecting mechanism with a microphone for dependable operation
- 50 mW RF power output for stable and long-distance transmission
- MIC/LINE input level switchable
- A backlit LCD provides extensive information, including the operating channel number and frequency in MHz, attenuator level, audio-input status, RF-output status, transmitter battery status, and accumulated operating time
- An LED indicator for audio-input status
- Approximately six hours of continuous operation with two AA-size alkaline (LR6) batteries
- Supplied with a soft case



Supplied Accessories

Softcase (1)

Specifications

Oscillator

Crystal-controlled PLL synthesiser

Type of emission

F3E

Carrier frequencies

798 MHz to 822 MHz

(TV channels 62 to 64)

RF power output

50 mW

Antenna

Integral type

Pilot tone signal

32 kHz

Frequency response

50 Hz to 18 kHz (typical)

Reference deviation

±10 kHz (-60 dBV, 1kHz input)

Signal-to-noise ratio

60 dB or more (±10 kHz deviation at

1 kHz modulation, A-weighted)

Audio attenuator adjustment range

0 to 21 dB (in 3 dB steps)

Audio input level

MIC input position: -60 dBV

(at 0 dB attenuator level),

LINE input position: +4 dBu

Audio input connector

XLR-3-11C type

Indicators

LCD

Operating channel number/frequency, attenuator level, audio input status, RF-output status, transmitter battery status, and accumulated operating time

LED

Audio-input status

Power requirements

DC 3.0 V (with two AA-size batteries)

Battery life

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 50 mW output

Dimensions (W x H x D)

44 x 99 x 36 mm

(1 3/4 x 4 x 1 1/8 inches)

Mass

Approx. 185 g (6.5 oz) including batteries

UTX-P1/67 UHF Synthesized Transmitter (67CE7)

Features

- Plug-on transmitter designed for use with the UWP Series tuners
- Operates over a wide 24 MHz frequency band within the range of 838 MHz to 864 MHz
- Converts a wired microphone to a wireless microphone via an XLR connector
- Compact and lightweight body provides balanced handling
- Attenuator function allows adjustment of the microphone-input level
- Durable connecting mechanism with a microphone for dependable operation
- 50 mW RF power output for stable and long-distance transmission
- MIC/LINE input level switchable
- A backlit LCD provides extensive information, including the operating channel number and frequency in MHz, attenuator level, audio-input status, RF-output status, transmitter battery status, and accumulated operating time
- An LED indicator for audio-input status
- Approximately six hours of continuous operation with two AA-size alkaline (LR6) batteries
- Supplied with a soft case



Supplied Accessories

Softcase (1)

Specifications

Oscillator

Crystal-controlled PLL synthesiser

Type of emission

F3E

Carrier frequencies

838 MHz to 864 MHz

(TV channels 67 to 69)

RF power output

50 mW

Antenna

Integral type

Pilot tone signal

32 kHz

Frequency response

50 Hz to 18 kHz (typical)

Reference deviation

±10 kHz (-60 dBV, 1kHz input)

Signal-to-noise ratio

60 dB or more (±10 kHz deviation at

1 kHz modulation, A-weighted)

Audio attenuator adjustment range

0 to 21 dB (in 3 dB steps)

Audio input level

MIC input position: -60 dBV

(at 0 dB attenuator level),

LINE input position: +4 dBu

Audio input connector

XLR-3-11C type

Indicators

LCD

Operating channel number/frequency, attenuator level, audio input status, RF-output status, transmitter battery status, and accumulated operating time

LED

Audio-input status

Power requirements

DC 3.0 V (with two AA-size batteries)

Battery life

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 50 mW output

Dimensions (W x H x D)

44 x 99 x 36 mm

(1 3/4 x 4 x 1 1/8 inches)

Mass

Approx. 185 g (6.5 oz) including batteries

UWP-C1/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- Consists of an omni-directional lavalier microphone, bodypack transmitter and portable tuner
- Suitable for a wide range of applications, from news gathering and interviews to talk shows and conferences
- The transmitter and tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The portable tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on both the transmitter and tuner
- An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status, RF-input level, tuner-battery status and accumulated operating time
- The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone



Applicable Models

DSR-PD170P DVCAM Camcorder

Supplied Accessories

Windscreen (1)

Microphone-holder clip (1)

Belt clip (for the bodypack transmitter) (1)

Belt clip (for the portable tuner) (1)

Microphone stand adaptor (for the portable tuner) (1)

Screw adaptor (for use in combination with the microphone stand adaptor) (1)

Shoe-mount adaptor (1)

Output cable (3-pole mini-plug/XLR-type) (1)

Specifications

- Lavalier Microphone

Microphone capsule:

Omni-directional, electret condenser type

Bodypack Transmitter

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (-60 dBV*, 1 kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Audio input level:

-60 dBV* (at 0 dB attenuator level)

Audio input connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries

Portable Tuner

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

15 dB μ

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack (x 1), unbalanced

Audio output level:

-58 dBm

Monitor output connector:

3.5 mm (5/32 inch) dia., stereo mini jack (x 1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level, tuner battery status, and accumulated operating time
LED: RF-input status

Power requirements:

DC 3.0 V
(Two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F)

Dimensions:

63.0 (W) x 100.0 (H) x 30.0 (D) mm
(2 1/2 x 4 x 1 3/16 inches)

Mass:

Approx. 180 g (6 oz) including batteries

*0 dBV = 1 Vrms

UWP-C1/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- Consists of an omni-directional lavalier microphone, bodypack transmitter and portable tuner
- Suitable for a wide range of applications, from news gathering and interviews to talk shows and conferences
- The transmitter and tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz
- The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The portable tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on both the transmitter and tuner
- An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status, RF-input level, tuner-battery status and accumulated operating time
- The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone



Applicable Models

DSR-PD170 DVCAM Camcorder

Supplied Accessories

- Windscreen (1)
- Microphone-holder clip (1)
- Belt clip (for the bodypack transmitter) (1)
- Belt clip (for the portable tuner) (1)
- Microphone stand adaptor (for the portable tuner) (1)
- Screw adaptor (for use in combination with the microphone stand adaptor) (1)
- Shoe-mount adaptor (1)
- Output cable (3-pole mini-plug/XLR-type) (1)

Specifications

- Lavalier Microphone

Microphone capsule:

Omni-directional, electret condenser type

Bodypack Transmitter

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (-60 dBV*, 1kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Audio input level:

-60 dBV* (at 0 dB attenuator level)

Audio input connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries

Portable Tuner

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

15 dB μ

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack
(x 1), unbalanced

Audio output level:

-58 dBm

Monitor output connector:

3.5 mm (5/32 inch) dia., stereo mini jack
(x 1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level, tuner battery status, and accumulated operating time
LED: RF-input status

Power requirements:

DC 3.0 V
(Two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F)

Dimensions:

63.0 (W) x 100.0 (H) x 30.0 (D) mm
(2 1/2 x 4 x 1 3/16 inches)

Mass:

Approx. 180 g (6 oz) including batteries

*0 dBV = 1 Vrms

UWP-C2/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- Consists of a handheld microphone and portable tuner
- Suitable for news gathering and for use in PA systems
- The microphone and tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The portable tuner employs a space diversity reception system and angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on both the microphone and tuner
- An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status, RF-input level, tuner-battery status and accumulated operating time



Supplied Accessories

Shoe-mount adaptor (1)
 Microphone holder (1)
 Screw adaptor (for use in combination with the microphone holder) (1)
 Microphone stand adaptor (for the portable tuner) (1)
 Screw adaptor (for use in combination with the microphone stand adaptor) (1)
 Belt clip (1)
 Output cable (3-pole mini plug/XLR-type) (1)

Specifications

Handheld microphone

Oscillator:
 Crystal-controlled PLL synthesizer
 Type of emission:
 F3E
 Carrier frequencies:
 798 MHz to 822 MHz (TV channels 62 to 64)
 RF power output:
 30 mW or 5 mW (selectable)
 Antenna:
 1/4 λ wave length wire
 Pilot tone signal:
 32 kHz
 System frequency response:
 100 Hz to 18 kHz (typical)
 Reference deviation:
 ± 5 kHz (94 dB SPL*, 1 kHz input)
 System signal-to-noise ratio:
 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
 Microphone capsule:
 Dynamic capsule (uni-directional)
 Audio attenuator adjustable range:
 0 to 21 dB (in 3 dB steps)
 Max. input sound pressure level:
 151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
 LED: Power status

Power requirements:

DC 3.0 V
 (with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
 (2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Portable Tuner

Oscillator:
 Crystal-controlled PLL synthesizer
 Type of reception:
 Space diversity
 Receiving frequencies:
 798 MHz to 822 MHz (TV channels 62 to 64)
 Antenna:
 1/4 λ wave length wire
 Pilot-tone signal:
 32 kHz
 RF squelch level:
 15 dB μ
 System frequency response:
 100 Hz to 18 kHz (typical)
 Reference deviation:
 ± 5 kHz (at 1 kHz modulation)
 System signal-to-noise ratio:
 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
 Audio output connector:
 3.5 mm (5/32 inch) dia., 3-pole mini jack (x 1), unbalanced

Audio output level:

-58 dBm

Monitor output connector:

3.5 mm (5/32 inch) dia., stereo mini jack (x 1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level, tuner battery status, and accumulated operating time
 LED: RF-input status

Power requirements:

DC 3.0 V
 (Two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F)

Dimensions:

63.0 (W) x 100.0 (H) x 30.0 (D) mm
 (2 1/2 x 4 x 1 3/16 inches)

Mass:

Approx. 180 g (6 oz) including batteries

*0 dB SPL = 20 μ Pa.

UWP-C2/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- Consists of a handheld microphone and portable tuner
- Suitable for news gathering and for use in PA systems
- The microphone and tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz
- The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The portable tuner employs a space diversity reception system and angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on both the microphone and tuner
- An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status, RF-input level, tuner-battery status and accumulated operating time



Supplied Accessories

Shoe-mount adaptor (1)
 Microphone holder (1)
 Screw adaptor (for use in combination with the microphone holder) (1)
 Microphone stand adaptor (for the portable tuner) (1)
 Screw adaptor (for use in combination with the microphone stand adaptor) (1)
 Belt clip (1)
 Output cable (3-pole mini plug/XLR-type) (1)

Specifications

Handheld microphone

Oscillator:
 Crystal-controlled PLL synthesizer
 Type of emission:
 F3E
 Carrier frequencies:
 838 MHz to 862 MHz (TV channels 67 to 69)
 RF power output:
 30 mW or 5 mW (selectable)
 Antenna:
 1/4 λ wave length wire
 Pilot tone signal:
 32 kHz
 System frequency response:
 100 Hz to 18 kHz (typical)
 Reference deviation:
 ± 5 kHz (94 dB SPL*, 1 kHz input)
 System signal-to-noise ratio:
 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
 Microphone capsule:
 Dynamic capsule (uni-directional)
 Audio attenuator adjustable range:
 0 to 21 dB (in 3 dB steps)
 Max. input sound pressure level:
 151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
 LED: Power status

Power requirements:

DC 3.0 V
 (with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
 (2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Portable Tuner

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

15 dB μ

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack (x 1), unbalanced

Audio output level:

-58 dBm

Monitor output connector:

3.5 mm (5/32 inch) dia., stereo mini jack (x 1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level, tuner battery status, and accumulated operating time
 LED: RF-input status

Power requirements:

DC 3.0 V
 (Two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F)

Dimensions:

63.0 (W) x 100.0 (H) x 30.0 (D) mm
 (2 1/2 x 4 x 1 3/16 inches)

Mass:

Approx. 180 g (6 oz) including batteries

*0 dB SPL = 20 μ Pa.

UWP-C3/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- The transmitter and tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- The plug-on transmitter converts a wired microphone to a wireless microphone via an XLR connection
- Attenuator function of the transmitter allows adjustment of the microphone-input level
- 50 mW RF power output for stable and long-distance transmission
- MIC/LINE input level switchable (Plug-on transmitter)
- The portable tuner employs a space diversity reception system and angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- The tuner is equipped with a stereo mini jack with monitor-volume control
- Approximately six hours of continuous operation with two AA-size batteries on both the transmitter and tuner
- A backlit LCD on the transmitter provides extensive information, including the operating channel number and frequency in MHz, attenuator level, audio-input status, RF-output status, transmitter-battery status, and accumulated operating time
- An LCD screen on the tuner provides extensive information, including the operating channel number and its frequency in MHz, audio-output status, RF-input level, tuner-battery status, and accumulated operating time



Supplied Accessories

- Shoe-mount adaptor (1)
- Belt clip (1)
- Output cable (3-pole mini-plug/XLR-type) (1)
- Output cable (3-pole mini-plug/stereo mini-plug) (1)
- Softcase (1)
- Operating instructions (1)

Applicable Models

F-112 Dynamic Microphone

Specifications

Plug-on Transmitter

- Oscillator
 - Crystal-controlled PLL synthesiser
- Type of emission
 - F3E
- Carrier frequencies
 - 798 MHz to 822 MHz
 - (TV channels 62 to 64)
- RF power output
 - 50 mW
- Antenna
 - Integral type
- Pilot-tone signal
 - 32 kHz
- Frequency response
 - 50 Hz to 18 kHz (typical)
- Reference deviation
 - ±10 kHz (-60 dBV, 1kHz input)
- Signal-to-noise ratio
 - 60 dB or more (±10 kHz deviation at 1 kHz modulation, A-weighted)
- Audio attenuator adjustment range
 - 0 to 21 dB (in 3 dB steps)

- Audio input level
 - MIC input position: -60 dBV
 - (at 0 dB attenuator level),
 - LINE input position: +4 dBu
- Audio input connector
 - XLR-3-11C type
- Indicators
 - LCD: operating channel number/frequency, attenuator level, audio-input status, RF-output status, transmitter battery status, and accumulated operating time
 - LED: audio-input status
- Power requirements
 - DC 3.0 V (two AA-size batteries)
- Battery life
 - Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 50 mW output
- Dimensions (W x H x D)
 - 44 x 99 x 35 mm
 - (1 3/4 x 4 x 1 7/16 inches)
- Mass
 - Approx. 185 g (6.5 oz) including batteries

Portable Tuner

- Oscillator
 - Crystal-controlled PLL synthesiser
- Type of reception
 - Space diversity
- Receiving frequencies
 - 798 MHz to 822 MHz (TV channels 62 to 64)
- Antenna
 - 1/4 λ wave length wire
- Pilot-tone signal
 - 32 kHz
- RF squelch level
 - 15 dBμ
- Frequency response
 - 50 Hz to 18 kHz (typical)

- Reference deviation
 - ±5 kHz (at 1kHz modulation)
- Signal-to-noise ratio
 - 60 dB or more (±5 kHz deviation at 1 kHz modulation, A-weighted)
- Audio output connector
 - 3.5 mm (5/32 inch) dia., 3-pole mini jack, unbalanced
- Audio output level
 - 58 dBm
- Monitor output connector
 - 3.5 mm (5/32 inch) dia., stereo mini jack
- Monitor output level
 - 5 mW (at 16 Ω)
- Indicators
 - LCD: operating channel number/frequency, audio-output status, RF-input level, tuner-battery status, and accumulated operating time
 - LED: RF-input status
- Power requirements
 - DC 3.0 V (two AA-size batteries)
- Battery life
 - Approx. 6 hours with Sony AA-size batteries at 25 °C (77 °F)
- Dimensions (W x H x D)
 - 63 x 100 x 30 mm
 - (2 1/2 x 4 x 1 3/16 inches)
- Mass
 - Approx. 180 g (6 oz) including batteries

UWP-C3/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- The transmitter and tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 864 MHz
- The plug-on transmitter converts a wired microphone to a wireless microphone via an XLR connection
- Attenuator function of the transmitter allows adjustment of the microphone-input level
- 50 mW RF power output for stable and long-distance transmission
- MIC/LINE input level switchable (Plug-on transmitter)
- The portable tuner employs a space diversity reception system and angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- The tuner is equipped with a stereo mini jack with monitor-volume control
- Approximately six hours of continuous operation with two AA-size batteries on both the transmitter and tuner
- A backlit LCD on the transmitter provides extensive information, including the operating channel number and frequency in MHz, attenuator level, audio-input status, RF-output status, transmitter-battery status, and accumulated operating time
- An LCD screen on the tuner provides extensive information, including the operating channel number and its frequency in MHz, audio-output status, RF-input level, tuner-battery status, and accumulated operating time



Supplied Accessories

- Shoe-mount adaptor (1)
- Belt clip (1)
- Output cable (3-pole mini-plug/XLR-type) (1)
- Output cable (3-pole mini-plug/stereo mini-plug) (1)
- Softcase (1)
- Operating instructions (1)

Applicable Models

F-112 Dynamic Microphone

Specifications

Plug-on Transmitter

- Oscillator
 - Crystal-controlled PLL synthesiser
- Type of emission
 - F3E
- Carrier frequencies
 - 838 MHz to 864 MHz
 - (TV channels 67 to 69)
- RF power output
 - 50 mW
- Antenna
 - Integral type
- Pilot-tone signal
 - 32 kHz
- Frequency response
 - 50 Hz to 18 kHz (typical)
- Reference deviation
 - ±10 kHz (-60 dBV, 1kHz input)
- Signal-to-noise ratio
 - 60 dB or more (±10 kHz deviation at 1 kHz modulation, A-weighted)
- Audio attenuator adjustment range
 - 0 to 21 dB (in 3 dB steps)

Audio input level

- MIC input position: -60 dBV (at 0 dB attenuator level),
- LINE input position: +4 dBu

Audio input connector

- XLR-3-11C type

Indicators

- LCD: operating channel number/frequency, attenuator level, audio-input status, RF-output status, transmitter battery status, and accumulated operating time
- LED: audio-input status

Power requirements

- DC 3.0 V (two AA-size batteries)

Battery life

- Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 50 mW output

Dimensions (W x H x D)

- 44 x 99 x 35 mm
- (1 3/4 x 4 x 1 7/16 inches)

Mass

- Approx. 185 g (6.5 oz) including batteries

Portable Tuner

- Oscillator
 - Crystal-controlled PLL synthesiser
- Type of reception
 - Space diversity
- Receiving frequencies
 - 838 MHz to 864 MHz
 - (TV channels 67 to 69)
- Antenna
 - 1/4 λ wave length wire
- Pilot-tone signal
 - 32 kHz
- RF squelch level
 - 15 dBμ
- Frequency response
 - 50 Hz to 18 kHz (typical)

Reference deviation

- ±5 kHz (at 1kHz modulation)

Signal-to-noise ratio

- 60 dB or more (±5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector

- 3.5 mm (5/32 inch) dia., 3-pole mini jack, unbalanced

Audio output level

- 58 dBm

Monitor output connector

- 3.5 mm (5/32 inch) dia., stereo mini jack

Monitor output level

- 5 mW (at 16 Ω)

Indicators

- LCD: operating channel number/frequency, audio-output status, RF-input level, tuner-battery status, and accumulated operating time

LED: RF-input status

Power requirements

- DC 3.0 V (two AA-size batteries)

Battery life

- Approx. 6 hours with Sony AA-size batteries at 25 °C (77 °F)

Dimensions (W x H x D)

- 63 x 100 x 30 mm
- (2 1/2 x 4 x 1 3/16 inches)

Mass

- Approx. 180 g (6 oz) including batteries

UWP-S1/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- Consists of a uni-directional lavalier microphone, bodypack transmitter and half-rack-size tuner
- Suitable for use in PA systems
- The transmitter and half-rack-size tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The half-rack-size tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the transmitter
- An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level
- The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with a lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone
- The half-rack-size tuner is equipped with both XLR (balanced) and 1/4-inch phone (unbalanced) type output connectors. The output level on the XLR-type connector can be switched between MIC and LINE level.



Supplied Accessories

- Windscreen (1)
- Microphone-holder clip (1)
- Belt clip (1)
- AC/DC adaptor (1)

Specifications

Lavalier Microphone

- Microphone capsule: Uni-directional, electret condenser type

Bodypack Transmitter

- Oscillator: Crystal-controlled PLL synthesizer
- Type of emission: F3E
- Carrier frequencies: 798 MHz to 822 MHz (TV channels 62 to 64)
- RF power output: 30 mW or 5 mW (selectable)
- Antenna: 1/4 λ wave length wire
- Pilot tone signal: 32 kHz
- Frequency response: 50 Hz to 18 kHz (typical)
- Reference deviation: ± 5 kHz (-60 dBV*, 1 kHz input)
- Signal-to-noise ratio: 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
- Audio attenuator adjustable range: 0 to 21 dB (in 3 dB steps)
- Audio input level: -60 dBV* (at 0 dB attenuator level)
- Audio input connector: 3.5 mm (5/32 inch) dia., 3-pole mini jack
- Indicators: LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status
- Power requirements: DC 3.0 V (with two AA-size alkaline (LR6) batteries)
- Battery life: Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output
- Dimensions: 63 (W) x 100 (H) x 27 (D) mm (2 1/2 x 4 x 1 1/8 inches)
- Mass: Approx. 140 g (4.9 oz) including batteries

Half 19-inch Rack-Size Tuner

- Oscillator: Crystal-controlled PLL synthesizer
- Type of reception: Space diversity
- Receiving frequencies: 798 MHz to 822 MHz (TV channels 62 to 64)
- Antenna: 1/4 λ wave length wire
- Pilot tone signal: 32 kHz
- RF squelch level: 25 dB μ
- Frequency response: 50 Hz to 18 kHz (typical)
- Reference deviation: ± 5 kHz (at 1 kHz modulation)
- Signal-to-noise ratio: 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
- Audio output connector: XLR-3-32 type (balanced) or 1/4-inch phone jack (unbalanced)
- Audio output level: XLR-3-32: -28 dBm (LINE level) or -58 dBm (MIC level)
1/4-inch phone jack: -30 dBm
- Monitor output connector: 1/4-inch stereo mini jack (1)
- Monitor output level: 5 mW (at 16 Ω)
- Indicators: LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status
- Power requirements: DC 9.0 V
- Dimensions: 212.0 (W) x 44.0 (H) x 209.0 (D) mm (8 3/8 x 1 3/4 x 8 1/4 inches)
- Mass: Approx. 1.3 kg (2 lb 14 oz)

*0 dBV = 1 Vrms

UWP-S1/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- Consists of a uni-directional lavalier microphone, bodypack transmitter and half-rack-size tuner
- Suitable for use in PA systems
- The transmitter and half-rack-size tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz
- The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The half-rack-size tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the transmitter
- An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level
- The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with a lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone
- The half-rack-size tuner is equipped with both XLR (balanced) and 1/4-inch phone (unbalanced) type output connectors. The output level on the XLR-type connector can be switched between MIC and LINE level.



Supplied Accessories

- Windscreen (1)
- Microphone-holder clip (1)
- Belt clip (1)
- AC/DC adaptor (1)

Specifications

Lavalier Microphone

- Microphone capsule: Uni-directional, electret condenser type

Bodypack Transmitter

- Oscillator: Crystal-controlled PLL synthesizer
- Type of emission: F3E
- Carrier frequencies: 838 MHz to 862 MHz (TV channels 67 to 69)
- RF power output: 30 mW or 5 mW (selectable)
- Antenna: 1/4 λ wave length wire
- Pilot tone signal: 32 kHz
- Frequency response: 50 Hz to 18 kHz (typical)
- Reference deviation: ± 5 kHz (-60 dBV*, 1kHz input)
- Signal-to-noise ratio: 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
- Audio attenuator adjustable range: 0 to 21 dB (in 3 dB steps)
- Audio input level: -60 dBV* (at 0 dB attenuator level)
- Audio input connector: 3.5 mm (5/32 inch) dia., 3-pole mini jack
- Indicators: LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status
- Power requirements: DC 3.0 V (with two AA-size alkaline (LR6) batteries)
- Battery life: Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output
- Dimensions: 63 (W) x 100 (H) x 27 (D) mm (2 1/2 x 4 x 1 1/8 inches)
- Mass: Approx. 140 g (4.9 oz) including batteries

Half 19-inch Rack-Size Tuner

- Oscillator: Crystal-controlled PLL synthesizer
- Type of reception: Space diversity
- Receiving frequencies: 838 MHz to 862 MHz (TV channels 67 to 69)
- Antenna: 1/4 λ wave length wire
- Pilot tone signal: 32 kHz
- RF squelch level: 25 dB μ

Frequency response:

- 50 Hz to 18 kHz (typical)
- Reference deviation: ± 5 kHz (at 1kHz modulation)
- Signal-to-noise ratio: 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
- Audio output connector: XLR-3-32 type (balanced) or 1/4-inch phone jack (unbalanced)
- Audio output level: XLR-3-32: -28 dBm (LINE level) or -58 dBm (MIC level)
1/4-inch phone jack: -30 dBm
- Monitor output connector: 1/4-inch stereo mini jack (1)
- Monitor output level: 5 mW (at 16 Ω)
- Indicators: LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status
- Power requirements: DC 9.0 V
- Dimensions: 212.0 (W) x 44.0 (H) x 209.0 (D) mm (8 3/8 x 1 3/4 x 8 1/4 inches)
- Mass: Approx. 1.3 kg (2 lb 14 oz)

*0 dBV = 1 Vrms

UWP-S2/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- Consists of a handheld microphone and half-rack-size tuner
- Suitable for use in PA systems
- The microphone and half-rack-size tuner operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The half-rack-size tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the microphone
- An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level
- The half-rack-size tuner is equipped with both XLR (balanced) and 1/4-inch phone (unbalanced) type output connectors. The output level on the XLR-type connector can be switched between MIC and LINE level.



Supplied Accessories

Microphone holder (1)
Screw adaptor (for use in combination with the microphone holder) (1)
AC/DC adaptor (1)

Specifications

Handheld Microphone

Oscillator:
Crystal-controlled PLL synthesizer

Type of emission:
F3E

Carrier frequencies:
798 MHz to 822 MHz (TV channels 62 to 64)

RF power output:
30 mW or 5 mW (selectable)

Antenna:
1/4 λ wave length wire

Pilot tone signal:
32 kHz

System frequency response:
100 Hz to 18 kHz (typical)

Reference deviation:
 ± 5 kHz (94 dB SPL*, 1 kHz input)

System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Microphone capsule:
Dynamic capsule (uni-directional)

Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)

Max. input sound pressure level:
151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time

LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Half 19-inch Rack-Size Tuner

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

RF squelch level:

25 dB μ

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

XLR-3-32 type (balanced) or 1/4-inch phone jack (unbalanced)

Audio output level:

XLR-3-32: -28 dBm (LINE level) or -58 dBm (MIC level)

1/4-inch phone jack: -30 dBm

Monitor output connector:

1/4-inch stereo mini jack (1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level

LED: RF-input status

Power requirements:

DC 9.0 V

Dimensions:

212.0 (W) x 44.0 (H) x 209.0 (D) mm
(8 3/8 x 1 3/4 x 8 1/4 inches)

Mass:

Approx. 1.3 kg (2 lb 14 oz)

*0 dB SPL = 20 μ Pa.

UWP-S2/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- Consists of a handheld microphone and half-rack-size tuner
- Suitable for use in PA systems
- The microphone and half-rack-size tuner operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz
- The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The half-rack-size tuner employs a space diversity reception system, angle-adjustable antennas, an RF squelch function and headphone-monitoring facility
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the microphone
- An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level
- The half-rack-size tuner is equipped with both XLR (balanced) and 1/4-inch phone (unbalanced) type output connectors. The output level on the XLR-type connector can be switched between MIC and LINE level.



Supplied Accessories

Microphone holder (1)
Screw adaptor (for use in combination with the microphone holder) (1)
AC/DC adaptor (1)

Specifications

Handheld Microphone

Oscillator:
Crystal-controlled PLL synthesizer

Type of emission:
F3E

Carrier frequencies:
838 MHz to 862 MHz (TV channels 67 to 69)

RF power output:
30 mW or 5 mW (selectable)

Antenna:
1/4 λ wave length wire

Pilot tone signal:
32 kHz

System frequency response:
100 Hz to 18 kHz (typical)

Reference deviation:
 ± 5 kHz (94 dB SPL*, 1 kHz input)

System signal-to-noise ratio:
60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Microphone capsule:
Dynamic capsule (uni-directional)

Audio attenuator adjustable range:
0 to 21 dB (in 3 dB steps)

Max. input sound pressure level:
151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time

LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Half 19-inch Rack-Size Tuner

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

RF squelch level:

25 dB μ

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio output connector:

XLR-3-32 type (balanced) or 1/4-inch phone jack (unbalanced)

Audio output level:

XLR-3-32: -28 dBm (LINE level) or -58 dBm (MIC level)

1/4-inch phone jack: -30 dBm

Monitor output connector:

1/4-inch stereo mini jack (1)

Monitor output level:

5 mW (at 16 Ω)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level

LED: RF-input status

Power requirements:

DC 9.0 V

Dimensions:

212.0 (W) x 44.0 (H) x 209.0 (D) mm
(8 3/8 x 1 3/4 x 8 1/4 inches)

Mass:

Approx. 1.3 kg (2 lb 14 oz)

*0 dB SPL = 20 μ Pa.

UWP-X1/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- Consists of a uni-directional lavalier microphone, bodypack transmitter and tuner module
- Suitable for use in PA systems
- Tuner modules can be installed into the SRP-X700P/X351P presentation mixer (max. two units), and a maximum of six modules can be installed in the MB-806A tuner base unit
- The transmitter and tuner module operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The tuner module incorporates a space diversity reception system and an RF squelch function
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the transmitter
- An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level
- The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with a lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the supplied lavalier microphone



Supplied Accessories

- Windscreen (1)
- Microphone-holder clip (1)
- Belt clip (1)

Specifications

Lavalier Microphone

- Microphone capsule: Uni-directional, electret condenser type

Bodypack Transmitter

- Oscillator: Crystal-controlled PLL synthesizer
- Type of emission: F3E
- Carrier frequencies: 798 MHz to 822 MHz (TV channels 62 to 64)
- RF power output: 30 mW or 5 mW (selectable)
- Antenna: 1/4 λ wave length wire
- Pilot tone signal: 32 kHz
- System frequency response: 50 Hz to 18 kHz (typical)
- Reference deviation: ± 5 kHz (-60 dBV*, 1kHz input)
- System signal-to-noise ratio: 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)
- Audio attenuator adjustable range: 0 to 21 dB (in 3 dB steps)
- Audio input level: -60 dBV* (at 0 dB attenuator level)
- Audio input connector: 3.5 mm (5/32 inch) dia., 3-pole mini jack

Indicators

- LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
- LED: Power status

Power requirements:

- DC 3.0 V (with two AA-size alkaline (LR6) batteries)

Battery life:

- Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

- 63 (W) x 100 (H) x 27 (D) mm (2 1/2 x 4 x 1 1/8 inches)

Mass:

- Approx. 140 g (4.9 oz) including batteries

Tuner Module

- Oscillator: Crystal-controlled PLL synthesizer
- Type of reception: Space diversity
- Receiving frequencies: 798 MHz to 822 MHz (TV channels 62 to 64)
- Antenna: 1/4 λ wave length wire
- Pilot-tone signal: 32 kHz
- RF squelch level: 25 dB μ
- System frequency response: 50 Hz to 18 kHz (typical)

Reference deviation:

- ± 5 kHz (at 1kHz modulation)

System signal-to-noise ratio:

- 60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Indicators

- LCD: Operating channel number/frequency, audio-output status, RF-input level
- LED: RF-input status

Power requirements:

- DC 9.0 V

Dimensions:

- 56.6 (W) x 25.5 (H) x 121.0 (D) mm (2 1/2 x 1 1/16 x 4 7/8 inches)

Mass:

- Approx. 150 g (5.3 oz)

*0 dBV = 1 Vrms

UWP-X1/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- Consists of a uni-directional lavalier microphone, bodypack transmitter and tuner module
- Suitable for use in PA systems
- Tuner modules can be installed into the SRP-X700P/X351P presentation mixer (max. two units), and a maximum of six modules can be installed in the MB-806A tuner base unit
- The transmitter and tuner module operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz
- The bodypack transmitter incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The tuner module incorporates a space diversity reception system and an RF squelch function
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the transmitter
- An LCD screen on the transmitter provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level
- The bodypack transmitter is equipped with a 3.5 mm dia., 3-pole mini-jack input connector with a lock mechanism, which accepts the output of any lavalier microphone equipped with a 3.5 mm dia. mini plug, as well as the output of the lavalier microphone



Supplied Accessories

- Windscreen (1)
- Microphone-holder clip (1)
- Belt clip (1)

Specifications

Lavalier Microphone

Microphone capsule:

Uni-directional, electret condenser type

Bodypack Transmitter

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (-60 dBV*, 1kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Audio input level:

-60 dBV* (at 0 dB attenuator level)

Audio input connector:

3.5 mm (5/32 inch) dia., 3-pole mini jack

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

63 (W) x 100 (H) x 27 (D) mm
(2 1/2 x 4 x 1 1/8 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries

Tuner Module

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

25 dB μ

System frequency response:

50 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level

LED: RF-input status

Power requirements:

DC 9.0 V

Dimensions:

56.6 (W) x 25.5 (H) x 121.0 (D) mm
(2 1/2 x 1 1/16 x 4 7/8 inches)

Mass:

Approx. 150 g (5.3 oz)

*0 dBV = 1 Vrms

UWP-X2/62 UHF Synthesized Wireless Microphone Package (62CE7)

Features

- Consists of a handheld microphone and tuner module
- Suitable for use in PA systems
- Tuner modules can be installed into the SRP-X700P/X351P presentation mixer (max. two units), and a maximum of six modules can be installed in the MB-806A tuner base unit
- The microphone and tuner module operate over a wide 24 MHz frequency band within the range of 798 MHz to 822 MHz
- The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The tuner module incorporates a space diversity reception system and an RF squelch function
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the microphone
- An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level



Supplied Accessories

- Microphone holder (1)
- Screw adaptor (for use in combination with the microphone holder) (1)

Specifications

Handheld Microphone

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (94 dB SPL*, 1 kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Microphone capsule:

Dynamic capsule (uni-directional)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Max. input sound pressure level:

151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Tuner Module

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

798 MHz to 822 MHz (TV channels 62 to 64)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

25 dB μ

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status

Power requirements:

DC 9.0 V

Dimensions:

56.6 (W) x 25.5 (H) x 121.0 (D) mm
(2 1/2 x 1 1/16 x 4 7/8 inches)

Mass:

Approx. 150 g (5.3 oz)

*0 dBV = 1 Vrms

UWP-X2/67 UHF Synthesized Wireless Microphone Package (67CE7)

Features

- Consists of a handheld microphone and tuner module
- Suitable for use in PA systems
- Tuner modules can be installed into the SRP-X700P/X351P presentation mixer (max. two units), and a maximum of six modules can be installed in the MB-806A tuner base unit
- The microphone and tuner module operate over a wide 24 MHz frequency band within the range of 838 MHz to 862 MHz
- The uni-directional, dynamic microphone incorporates selectable RF-output level (5 mW or 30 mW), and adjustable audio-attenuator level
- The tuner module incorporates a space diversity reception system and an RF squelch function
- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries on the microphone
- An internal LCD screen on the microphone provides extensive information: operating channel/frequency, attenuator level, RF-output level setting (Low/High), audio-input status, RF-output status, transmitter-battery status and accumulated operating time
- An LCD screen on the tuner provides extensive information: operating channel/frequency, audio-output status and RF-input level



Supplied Accessories

- Microphone holder (1)
- Screw adaptor (for use in combination with the microphone holder) (1)

Specifications

Handheld Microphone

Oscillator:

Crystal-controlled PLL synthesizer

Type of emission:

F3E

Carrier frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

RF power output:

30 mW or 5 mW (selectable)

Antenna:

1/4 λ wave length wire

Pilot tone signal:

32 kHz

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (94 dB SPL*, 1 kHz input)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Microphone capsule:

Dynamic capsule (uni-directional)

Audio attenuator adjustable range:

0 to 21 dB (in 3 dB steps)

Max. input sound pressure level:

151 dB SPL* (at 21 dB attenuator level)

Indicators

LCD: Operating channel number/frequency, attenuator level, RF-output level (High/Low), audio input status, RF-output status, transmitter battery status, and accumulated operating time
LED: Power status

Power requirements:

DC 3.0 V
(with two AA-size alkaline (LR6) batteries)

Battery life:

Approx. 6 hours with Sony AA-size alkaline (LR6) batteries at 25 °C (77 °F) at 30 mW output

Dimensions:

52 dia. x 240 mm
(2 1/8 dia. x 9 1/2 inches)

Mass:

Approx. 300 g (10.6 oz) including batteries

Tuner Module

Oscillator:

Crystal-controlled PLL synthesizer

Type of reception:

Space diversity

Receiving frequencies:

838 MHz to 862 MHz (TV channels 67 to 69)

Antenna:

1/4 λ wave length wire

Pilot-tone signal:

32 kHz

RF squelch level:

25 dB μ

System frequency response:

100 Hz to 18 kHz (typical)

Reference deviation:

± 5 kHz (at 1 kHz modulation)

System signal-to-noise ratio:

60 dB or more (± 5 kHz deviation at 1 kHz modulation, A-weighted)

Indicators

LCD: Operating channel number/frequency, audio-output status, RF-input level
LED: RF-input status

Power requirements:

DC 9.0 V

Dimensions:

56.6 (W) x 25.5 (H) x 121.0 (D) mm
(2 1/2 x 1 1/16 x 4 7/8 inches)

Mass:

Approx. 150 g (5.3 oz)

*0 dBV = 1 Vrms

WD-850A UHF Antenna Divider (758 MHz to 862 MHz)

Features

- Provides diversity output for up to four receivers
- Multi-channel operation by combination with tuners such as the MB-8N and WRU-8N, or MB-806A and WRU-806/806B
- Cascade output can be used for an additional antenna divider or receiver
- Two pairs of antenna input connectors for up to four AN-820A antennas to expand the operating area of a wireless microphone system
- DC 9V power supply for the AN-820A UHF antennas via coaxial cable



Supplied Accessories
50 ohms BNC terminators (6)

Dimensions (W x H x D):
482 x 44 x 300 mm
(19 x 1 3/4 x 11 7/8 inches)

Specifications

Frequency range:
758 MHz to 862 MHz

Mass:
4.2 kg (9 lb 4 oz)

Channel distribution:
Inputs: 2 pairs
Outputs: 4 pairs

Input/output Impedance:
50 Ω

Cascade output:
1 pair

Power supply for antenna booster (supplied from antenna input connectors):
DC 9 V

Power consumption:
6 W +outlet 300 W max.

WRR-855B/62 UHF Synthesized Diversity Tuner (62CE7)

Features

- Slot-in type space diversity tuner designed for use with Sony Betacam SX camcorders and HDCAM camcorder (HDW-750 only)
- Weatherproof structure
- Compact design and lightweight design; 280 g (9.9 oz)
- A D-sub 15-pin connector for audio output to a Sony professional camcorder and for receiving its power supply from the HDCAM camcorder (HDW-750 only) or Betacam SX camcorder
- Operates in the 798 MHz to 822 MHz (TV channels 62 to 64) UHF frequency band
- LED indicators for AF/RF conditions
- LCD indicator for operating channel
- Switchable RF muting; ON (10 dB μ) or OFF
- Use of the CA-WR855 (optional camera adaptor) allows the WRR-855B to be mounted on Sony DSR-300/500WS DVCAM camcorders and powered from the camcorder.

Supplied Accessories

Antenna (2)

Specifications

Receiving channel:

1 channel

Receiving frequency:

798 MHz to 822 MHz

Oscillator:

1st: PLL synthesizer, 2nd: Crystal oscillator

De-emphasis:

50 μ s

Reference deviation:

± 5 kHz deviation at 1 kHz modulation

(Max. deviation: ± 40 kHz modulation)

Selectivity:

60 dB or more at ± 250 kHz

Spurious rejection:

80 dB or more

Frequency range:

40 to 18 kHz (typical)

Signal-to-noise ratio:

60 dB or more at 60 dB μ RF input at

reference deviation, A-weighted

RF muting level:

10 dB μ or OFF selectable

Audio output level:

-40 dBm at reference deviation

Audio output connector:

D-sub 15-pin (1), balanced

Antenna connector:

BNC-R type (2), 50 Ω (nominal)

impedance

Operating voltage:

DC 7 V

Current consumption:

200 mA or less at external DC 7 V

Dimensions (W x H x D):

88.0 x 119.0 x 31.3 mm

(3 1/2 x 4 3/4 x 1 1/4 inches)

Mass:

280 g (9.9 oz)



BTA-801: Camera mount adaptor

Use of the BTA-801 (optional portable tuner mount adaptor) allows the WRR-855B to be mounted on Sony professional camcorders and powered from the camcorder via a DC cable supplied with BTA-801

WRR-855B/67 UHF Synthesized Diversity Tuner (67CE7)

Features

- Slot-in type space diversity tuner designed for use with Sony Betacam SX camcorders and HDCAM camcorder (HDW-750 only)
- Weatherproof structure
- Compact design and lightweight design; 280 g (9.9 oz)
- A D-sub 15-pin connector for audio output to a Sony professional camcorder and for receiving its power supply from the HDCAM camcorder (HDW-750 only) or Betacam SX camcorder
- Operates in the 838 MHz to 862 MHz UHF frequency band (TV channels 67 and 69)
- LED indicators for AF/RF conditions
- LCD indicator for operating channel
- Switchable RF muting; ON (10 dB μ) or OFF
- Use of the CA-WR855 (optional camera adaptor) allows the WRR-855B to be mounted on Sony DSR-300/500WS DVCAM camcorders and powered from the camcorder.

Supplied Accessories

Antenna (2)

Optional Accessories

CA-WR855 Camera Adaptor

BTA-801 Portable Tuner Mount Adaptor

Specifications

Receiving channel number:

1 channel

Receiving frequency:

838 MHz to 862 MHz

Oscillator:

1st: PLL synthesizer, 2nd: Crystal oscillator

De-emphasis:

50 μ s

Reference deviation:

± 5 kHz deviation at 1 kHz modulation
(Max. deviation: ± 40 kHz modulation)

Selectivity:

60 dB or more at ± 250 kHz

Spurious rejection:

80 dB or more

Frequency range:

40 to 18 kHz (typical)

Signal-to-noise ratio:

60 dB or more at 60 dB μ RF input at
reference deviation, A-weighted

RF muting level:

10 dB μ or OFF selectable

Audio output level:

-40 dBm at reference deviation

Audio output connector:

D-sub 15-pin (1), balanced

Antenna connector:

BNC-R type (2), 50 Ω (nominal)
impedance

Operating voltage:

DC 7 V

Current consumption:

200 mA or less at external DC 7 V

Dimensions (W x H x D):

88.0 x 119.0 x 31.3 mm
(3 1/2 x 4 3/4 x 1 1/4 inches)

Mass:

280 g (9.9 oz)



BTA-801: Camera mount adaptor

Use of the BTA-801 (optional portable tuner mount adaptor) allows the WRR-855B to be mounted on Sony professional camcorders and powered from the camcorder via a DC cable supplied with BTA-801

WRR-862B/62 UHF Synthesized Dual Diversity Tuner (62CE7)

Features

- Receives two independent RF signals on two separate channels
- Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 to 64)
- A space diversity system is employed on both channels to eliminate signal dropout and provide stable reception
- Compact and lightweight body; 400 g (14.1 oz.) including batteries
- Easily mounts on Sony professional camcorders with the supplied attachment kit and case (*)
- Two SMC9-4S (Sony 4-pin) audio output connectors on the top panel
- Rugged, diecast magnesium frame
- LED indicators for each channel to indicate RF input level (green/red indication), diversity reception status and transmitter battery alarm
- LCD screen for each channel to indicate operating channel/frequency, AF output level, RF input level, receiver battery status and accumulated battery operating time
- Five hours of continuous operation with four AA-size (LR6) alkaline batteries
- Capable of operating on external power from Sony camcorders via the supplied DC cable
- Selectable RF squelch threshold: 5 dB μ , 10 dB μ , 15 dB μ and OFF
- A stereo mini jack for monitoring the output sound (switchable: Tuner 1/2/mixed) with headphones (A monitor volume control is also included.)

(*) A-8278-057-A mounting bracket (service part) may also be required.



Applicable Models

DVW-790P Digital Betacam Camcorder

MSW-970P MPEG IMX Camcorder

PDW-510 XDCAM Camcorder (DVCAM Recording)

PDW-530 XDCAM Camcorder (MPEG IMX/DVCAM Recording)

Supplied Accessories

Attachment case (1)

Mounting plate (1)

DC cable (1)

Output cable (2)

Antenna (2)

Specifications

Receiving channel number:

2 channels

Receiving frequencies:

2 frequencies within 798 MHz to 822 MHz

Local oscillators:

1st: PLL synthesizer, 2nd: Crystal oscillator

De-emphasis:

50 μ s

System dynamic range:

96 dB or more (101 dB typical)

Reference deviation:

\pm 5 kHz deviation at 1 kHz modulation
(Max. deviation: \pm 40 kHz deviation at 1 kHz modulation)

Selectivity:

60 dB or more at \pm 250 kHz

Spurious rejection:

70 dB or more

Frequency response:

40 Hz to 18 kHz (typical)

Signal-to-noise ratio:

60 dB or more (65 dB typical) at 60 dB μ

RF input at reference deviation,

A-weighted

RF squelch level:

5 dB μ , 10 dB μ , 15 dB μ or OFF

Audio output level:

-58 dBm at reference deviation

Audio output connector:

SMC9-4S (Sony 4-pin, x 2), balanced

Antenna connector:

BNC-R (x 2), 50 Ω (nominal) impedance

Monitor output:

3.5 mm dia. mini jack (x 1, 5 mW), Tuner 1/2/mixed selectable

Operating voltage:

Batteries: DC 6 V (four AA-size (LR6)

alkaline batteries)

External: DC 12 V

Battery life:

Approx. 5 hours with Sony AA-size (LR6)

alkaline batteries at 25 °C (77 °F)

Power consumption:

Batteries: approx. 230 mA at DC 6 V

External: approx. 135 mA at DC 12 V

Dimensions (W x H x D):

89.0 x 120.0 x 29.5 mm

(3 5/8 x 4 3/4 x 1 3/16 inches)

Mass:

Approx. 400 g (14.1 oz) including batteries

WRR-862B/67 UHF Synthesized Dual Diversity Tuner (67CE7)

Features

- Receives two independent RF signals on two separate channels
- Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 to 69)
- A space diversity system is employed on both channels to eliminate signal dropout and provide stable reception
- Compact and lightweight body; 400 g (14.1 oz) including batteries
- Easily mounts on Sony professional camcorders with the supplied attachment kit and case (*)
- Two SMC9-4S (Sony 4-pin) audio output connectors on the top panel
- Rugged, diecast magnesium frame
- LED indicators for each channel to indicate RF input level (green/red indication), diversity reception status and transmitter battery alarm
- LCD screen for each channel to indicate operating channel/frequency, AF output level, RF input level, receiver battery status and accumulated battery operating time
- Five hours of continuous operation with four AA-size (LR6) alkaline batteries
- Capable of operating on external power from Sony camcorders via the supplied DC cable
- Selectable RF squelch threshold: 5 dB μ , 10 dB μ , 15 dB μ and OFF
- A stereo mini jack for monitoring the output sound (switchable: Tuner 1/2/mixed) with headphones (A monitor volume control is also included.)

(*) A-8278-057-A mounting bracket (service part) may also be required.



Supplied Accessories

- Attachment case (1)
- Mounting plate (1)
- DC cable (1)
- Output cable (2)
- Antenna (2)

Specifications

- Receiving channel number:
 - 2 channels
- Receiving frequencies:
 - 2 frequencies within 838 MHz to 862 MHz
- Local oscillators:
 - 1st: PLL synthesizer, 2nd: Crystal oscillator
- De-emphasis:
 - 50 μ s
- System dynamic range:
 - 96 dB or more (101 dB typical)
- Reference deviation:
 - ± 5 kHz deviation at 1 kHz modulation
 - (Max. deviation: ± 40 kHz deviation at 1 kHz modulation)
- Selectivity:
 - 60 dB or more at ± 250 kHz
- Spurious rejection:
 - 70 dB or more
- Frequency response:
 - 40 Hz to 18 kHz (typical)
- Signal-to-noise ratio:
 - 60 dB or more (65 dB typical) at 60 dB μ
 - RF input at reference deviation, A-weighted
- RF squelch level:
 - 5 dB μ , 10 dB μ , 15 dB μ or OFF
- Audio output level:
 - 58 dBm at reference deviation

Audio output connector:

- SMC9-4S (Sony 4-pin, x 2), balanced

Antenna connector:

- BNC-R (x 2), 50 Ω (nominal) impedance

Monitor output:

- 3.5 mm dia. mini jack (x 1, 5 mW), Tuner 1/2/mixed selectable

Operating voltage:

- Batteries: DC 6 V (four AA-size (LR6) alkaline batteries)
- External: DC 12 V

Battery life:

- Approx. 5 hours with Sony AA-size (LR6) alkaline batteries at 25 °C (77 °F)

Power consumption:

- Batteries: approx. 230 mA at DC 6 V
- External: approx. 135 mA at DC 12 V

Dimensions (W x H x D):

- 89.0 x 120.0 x 29.5 mm
- (3 5/8 x 4 3/4 x 1 3/16 inches)

Mass:

- Approx. 400 g (14.1 oz) including batteries

WRT-807B/62 UHF Synthesized Wireless Microphone (62CE7)

Features

- Dynamic microphone capsule that is employed in the Sony F-780 professional vocal microphone
- High sound quality for vocals — powerful, crisp and clean sound
- Operates over a 24 MHz frequency band within the range of 798 to 822 MHz (TV channels 62 to 64)
- LCD for display of operating channel, AF/RF conditions, attenuator, battery status and accumulated operating hours
- Up to 5 hours of continuous operation with one AA-size (LR6) battery
- 10 mW RF power output
- Lockable external power switch
- Transmits a low battery alarm to most Sony receivers



Supplied Accessories

- Microphone holder (PF1/2 thread) (1)
- Metal screw adaptor (PF1/2 to W3/8) (1)

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequencies:

798 to 822 MHz

Microphone capsule:

Dynamic

Directivity:

Uni-directional

RF power output:

10 mW (50 Ω load)

Antenna:

1/4 wave length wire antenna

Reference deviation:

± 5 kHz (94 dB SPL*, at 1 kHz)

Frequency response:

50 Hz to 15 kHz (typical)

Signal-to-noise ratio (A-weighted):

60 dB or more (A-weighted, at reference deviation)

Attenuator adjustment range (PAD):

0 dB to 21 dB, variable in 3 dB steps

Max. input sound pressure level:

151 dB SPL* (with 21 dB attenuator)

Operating voltage:

DC 1.5 V (one AA-size (LR6) alkaline battery)

Battery life:

Approx. 5 hours with Sony AA-size (LR6) alkaline battery at 25 °C (77 °F)

Dimensions (diameter x length):

51 x 238 mm (2 1/8 x 9 3/8 inches)

Mass:

440 g (15.5 oz) including battery

*0 dB SPL = 2E-5 Pa.

WRT-807B/67 UHF Synthesized Wireless Microphone (67CE7)

Features

- Dynamic microphone capsule that is employed in the Sony F-780 professional vocal microphone
- High sound quality for vocals — powerful, crisp and clean sound
- Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 66 to 67)
- LCD for display of operating channel, AF/RF conditions, attenuator, battery status and accumulated operating hours
- Up to 5 hours of continuous operation with one AA-size (LR6) battery
- 10 mW RF power output
- Lockable external power switch
- Transmits a low battery alarm to most Sony receivers



Supplied Accessories

- Microphone holder (PF1/2 thread) (1)
- Metal screw adaptor (PF1/2 to W3/8) (1)

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequencies:

838 MHz to 862 MHz

Microphone capsule:

Dynamic

Directivity:

Uni-directional

RF power output:

10 mW (50 Ω load)

Antenna:

1/4 wave length wire antenna

Reference deviation:

± 5 kHz (94 dB SPL*, at 1 kHz)

Frequency response:

50 Hz to 15 kHz (typical)

Signal-to-noise ratio (A-weighted):

60 dB or more (A-weighted, at reference deviation)

Attenuator adjustment range (PAD):

0 dB to 21 dB, variable in 3 dB steps

Max. input sound pressure level:

151 dB SPL* (with 21 dB attenuator)

Operating voltage:

DC 1.5 V (one AA-size (LR6) alkaline battery)

Battery life:

Approx. 5 hours with Sony AA-size (LR6) alkaline battery at 25 °C (77 °F)

Dimensions (diameter x length):

51 x 238 mm (2 1/8 x 9 3/8 inches)

Mass:

440 g (15.5 oz) including battery

*0 dB SPL = 2E-5 Pa.

WRT-822B/62 UHF Synthesized Wireless Transmitter (62CE7)

Features

- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries
- Compact and lightweight body; 63 (W) x 103 (H) x 17 (D) mm (2 1/2 x 4 1/8 x 11/18 inches)
- Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 to 64)
- Easy-to-read LCD for comprehensive system information such as channel number, channel frequency in MHz, AF, RF, attenuator, battery status, accumulated working time
- 20 mW RF power output
- Accepts professional lavalier microphones fitted with SMC9-4P type connector

Supplied Accessories

Soft case (1)

Optional Accessories

ECM-350BC Headset Microphone

ECM-310BC Headset Microphone

ECM-77BC Lavalier Microphone

ECM-77SC Lavalier Microphone

ECM-77FC Lavalier Microphone

ECM-66BC Lavalier Microphone

ECM-55BC Lavalier Microphone

ECM-44BC Lavalier Microphone

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequency:

798 MHz to 822 MHz

RF power output:

20 mW (50 Ω load)

Antenna:

1/4 wave length whip antenna

Reference deviation:

\pm 5 kHz (-60 dBV, 1 kHz)

Frequency response:

70 Hz to 15 kHz (typical)

Signal-to-noise ratio:

60 dB (A-weighted, at reference deviation)

Attenuator adjustment range (pad):

0 to 21 dB, variable in 3 dB steps

Max. input level:

-3 dBV (with 21 dB attenuator)

Operating voltage:

DC 3 V (two AA-size (LR6) alkaline batteries)

Battery life:

Approx. 6 hours with Sony AA-size (LR6) alkaline batteries at 25 °C (77 °F)

Dimensions:

63 (W) x 103 (H) x 17 (D) mm
(2 1/2 x 4 1/8 x 11/16 inches)

Mass:

145 g (5.1 oz) including batteries



* 0 dBV = 1 V r.m.s.

WRT-822B/67 UHF Synthesized Wireless Transmitter (67CE7)

Features

- Approx. six hours of continuous operation with two AA-size (LR6) alkaline batteries
- Compact and lightweight body; 63 (W) x 103 (H) x 17 (D) mm (2 1/2 x 4 1/8 x 11/18 inches)
- Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 to 69)
- Easy-to-read LCD for comprehensive system information such as channel number, channel frequency in MHz, AF, RF, attenuator, battery status, accumulated working time
- 20 mW RF power output
- Accepts professional lavalier microphones fitted with SMC9-4P type connector

Supplied Accessories

Soft case (1)

Optional Accessories

ECM-350BC Headset Microphone

ECM-310BC Headset Microphone

ECM-77BC Lavalier Microphone

ECM-77SC Lavalier Microphone

ECM-77FC Lavalier Microphone

ECM-66BC Lavalier Microphone

ECM-55BC Lavalier Microphone

ECM-44BC Lavalier Microphone

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequency:

838 MHz to 862 MHz

RF power output:

20 mW (50 Ω load)

Antenna:

1/4 wave length whip antenna

Reference deviation:

± 5 kHz (-60 dBV, 1 kHz)

Frequency response:

70 Hz to 15 kHz (typical)

Signal-to-noise ratio:

60 dB (A-weighted, at reference deviation)

Attenuator adjustment range (pad):

0 to 21 dB, variable in 3 dB steps

Max. input level:

-3 dBV (with 21 dB attenuator)

Operating voltage:

DC 3 V (two AA-size (LR6) alkaline batteries)

Battery life:

Approx. 6 hours with Sony AA-size (LR6) alkaline batteries at 25 °C (77 °F)

Dimensions:

63 (W) x 103 (H) x 17 (D) mm
(2 1/2 x 4 1/8 x 11/16 inches)

Mass:

145 g (5.1 oz) including batteries

* 0 dBV = 1 V_{r.m.s.}



WRT-847B/62 UHF Synthesized Transmitter Unit (62CE7)

Features

- A choice of five optional microphone capsules, each with specific characteristics to suit a range of different applications (one capsule is required for the WRT-847B for function.)
- Switchable audio compander time constant to suit different capsules
- Selectable RF output level: 10 mW or 50 mW
- Audio gain and attenuation settings within the range of +9 dB to -12 dB in 3 dB steps
- Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 and 64)
- Lockable external power switch (ON/OFF)
- Easy-to-read LCD with back light indicates operating conditions such as channel number/frequency, audio input level, compander time constant, battery status and accumulated battery operating time
- Eight hours of continuous operation with two AA-size (LR6) alkaline batteries
- Transmits a low battery warning to most Sony receivers



Supplied Accessories

Microphone holder (1)
Stand adaptor (PF1/2 to NS5/8 type) (1)
Soft case (1)
Channel color seal (1)

Optional Accessories

CU-F780 Capsule Unit
CU-G780 Capsule Unit
CU-E700 Capsule Unit
CU-E672 Capsule Unit
CU-F117 Capsule Unit

Specifications

Oscillator:
Crystal controlled PLL synthesizer

Type of emission:
110KF3E

Carrier frequencies:
798 MHz to 822 MHz

RF power output:
10 mW/50 mW selectable (50 Ω load)

Type of antenna:
1/4 wave length whip antenna

Pre-emphasis:
50 μ s

Reference deviation:
 ± 5 kHz (94 dB SPL*, 1 kHz)

Frequency response:
50 Hz to 18 kHz (typical)

Signal to noise ratio:
60 dB or more (A-weighted, at reference deviation)

Audio gain control:
-12 dB to 9 dB (in 3 dB steps)

Max. input sound pressure level:
142 dB SPL* (with
CU-F780/G780/E700/F117 at audio gain
-12 dB)
120 dB SPL* (with CU-E672)

Power requirements:
DC 3.0 V (two LR6 AA-size alkaline
batteries)

Battery life:
Approx. 8 hours at 25°C (77°F) with Sony
AA-size (LR6) alkaline batteries, at 10 mW
RF output

Dimensions (diameter x length):
37 x 150 mm (1 1/2 x 6 inches)

Mass:
Approx. 190 g (6.7 oz) including batteries

* 0 dB SPL = 2E-5 Pa.

WRT-847B/67 UHF Synthesized Transmitter Unit

Features

- A choice of five optional microphone capsules, each with specific characteristics to suit a range of different applications (one capsule is required for the WRT-847B for function.)
- Switchable audio compander time constant to suit different capsules
- Selectable RF output level: 10 mW or 50 mW
- Audio gain and attenuation settings within the range of +9 dB to -12 dB in 3 dB steps
- Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 and 69)
- Lockable external power switch (ON/OFF)
- Easy-to-read LCD with back light indicates operating conditions such as channel number/frequency, audio input level, compander time constant, battery status and accumulated battery operating time
- Eight hours of continuous operation with two AA-size (LR6) alkaline batteries
- Transmits a low battery warning to most Sony receivers



Supplied Accessories

Microphone holder (1)
Stand adaptor (PF1/2 to NS5/8 type) (1)
Soft case (1)
Channel color seal (1)

Optional Accessories

CU-F780 Capsule Unit
CU-G780 Capsule Unit
CU-E700 Capsule Unit
CU-E672 Capsule Unit
CU-F117 Capsule Unit

Specifications

Oscillator:

Crystal controlled PLL synthesizer

Type of emission:

110KF3E

Carrier frequencies:

838 MHz to 862 MHz

RF power output:

10 mW/50 mW selectable (50 Ω load)

Type of antenna:

1/4 wave length whip antenna

Pre-emphasis:

50 μ s

Reference deviation:

± 5 kHz (94 dB SPL*, 1 kHz)

Frequency response:

50 Hz to 18 kHz (typical)

Signal to noise ratio:

60 dB or more (A-weighted, at reference deviation)

Audio gain control:

-12 dB to 9 dB (in 3 dB steps)

Max. input sound pressure level:

142 dB SPL* (with
CU-F780/G780/E700/F117 at audio gain
-12 dB)
120 dB SPL* (with CU-E672)

Power requirements:

DC 3.0 V (two LR6 AA-size alkaline
batteries)

Battery life:

Approx. 8 hours at 25°C (77°F) with Sony
AA-size (LR6) alkaline batteries, at 10 mW
RF output

Dimensions (diameter x length):

37 x 150 mm (1 1/2 x 6 inches)

Mass:

Approx. 190 g (6.7 oz) including batteries

* 0 dB SPL = 2E-5 Pa.

WRT-8B/62 UHF Synthesized Transmitter (62CE7)

Features

- Extremely compact and lightweight: 140 g including batteries, 63 (W) x 83 (H) x 17 (D) mm
- Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 to 64)
- Selectable RF output powers: 10 mW or 50 mW
- Switchable input level: LINE level or MIC level
- Variable audio attenuator
- Approx. 13 hours of continuous operation with two AA-size (LR6) alkaline batteries at 10 mW output (Approx. six hours of operation at 50 mW output)
- Removable antenna with SMA connector
- LCD screen indicates extensive information such as operating channel/frequency, audio input level, RF output level, transmitter battery status and accumulated operating time
- A red LED indicator flashes when the AF level exceeds a designated level
- Transmits a low battery warning to Sony receivers
- Rugged, die-cast magnesium frame
- Accepts the output of lavalier microphones fitted with a Sony SMC9-4P connector

Supplied Accessories

Soft case (1)
Spare battery case (1)
Microphone cable (1)

Optional Accessories

ECM-77BC Lavalier Microphone
ECM-77FC Lavalier Microphone
ECM-66BC Lavalier Microphone
ECM-55BC Lavalier Microphone
ECM-44BC Lavalier Microphone
ECM-310BC Headset Microphone
ECM-350BC Headset Microphone

Specifications

Oscillator:

Crystal-controlled PLL synthesizer

Carrier frequencies:

798 MHz to 822 MHz

Oscillator:

Crystal controlled PLL synthesizer

RF power output:

50 mW/10 mW (e.r.p.) selectable

Antenna:

1/4 wavelength wire (SMA-J type connector)

Frequency response:

40 Hz to 20 kHz (typical)

Reference deviation:

±5 kHz (-60 dBV, 1 kHz input, MIC position)

±5 kHz (-20 dBu, 1 kHz input, LINE position)

Signal-to-noise ratio:

60 dB or more (A-weighted)

Attenuator adjustment range:

0 to 40 dB, continuous

Max. input level:

-2 dBV (1 kHz input, MIC position)

+38 dBu (1 kHz input, LINE position)

Audio input level:

MIC level/LINE level switchable

Audio input connector:

Sony SMC9-4S type

Power requirements:

DC 3.0 V (with two LR6 alkaline batteries)

Battery life:

Approx. 6 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 50 mW output

Approx. 13 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 10 mW output

Dimensions:

63 (W) x 83 (H) x 17 (D) mm
(2 1/2 x 3 3/8 x 11/16 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries



WRT-8B/67 UHF Synthesized Transmitter (67CE7)

Features

- Extremely compact and lightweight: 140 g including batteries, 63 (W) x 83 (H) x 17 (D) mm
- Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 to 69)
- Selectable RF output powers: 10 mW or 50 mW
- Switchable input level: LINE level or MIC level
- Variable audio attenuator
- Approx. 13 hours of continuous operation with two AA-size (LR6) alkaline batteries at 10 mW output (Approx. six hours of operation at 50 mW output)
- Removable antenna with SMA connector
- LCD screen indicates extensive information such as operating channel/frequency, audio input level, RF output level, transmitter battery status and accumulated operating time
- A red LED indicator flashes when the AF level exceeds a designated level
- Transmits a low battery warning to Sony receivers
- Rugged, die-cast magnesium frame
- Accepts the output of lavalier microphones fitted with a Sony SMC9-4P connector

Supplied Accessories

Soft case (1)
Spare battery case (1)
Microphone cable (1)

Optional Accessories

ECM-77BC Lavalier Microphone
ECM-77FC Lavalier Microphone
ECM-66BC Lavalier Microphone
ECM-55BC Lavalier Microphone
ECM-44BC Lavalier Microphone
ECM-310BC Headset Microphone
ECM-350BC Headset Microphone

Specifications

Oscillator:

Crystal-controlled PLL synthesizer

Carrier frequencies:

838 MHz to 862 MHz

Oscillator:

Crystal controlled PLL synthesizer

RF power output:

50 mW/10 mW (e.r.p.) selectable

Antenna:

1/4 wavelength wire (SMA-J type connector)

Frequency response:

40 Hz to 20 kHz (typical)

Reference deviation:

±5 kHz (-60 dBV, 1 kHz input, MIC position)

±5 kHz (-20 dBu, 1 kHz input, LINE position)

Signal-to-noise ratio:

60 dB or more (A-weighted)

Attenuator adjustment range:

0 to 40 dB, continuous

Max. input level:

-2 dBV (1 kHz input, MIC position)
+38 dBu (1 kHz input, LINE position)

Audio input level:

MIC level/LINE level switchable

Audio input connector:

Sony SMC9-4S type

Power requirements:

DC 3.0 V (with two LR6 alkaline batteries)

Battery life:

Approx. 6 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 50 mW output
Approx. 13 hours with Sony LR6 alkaline batteries at 25 °C (77 °F) at 10 mW output

Dimensions:

63 (W) x 83 (H) x 17 (D) mm
(2 1/2 x 3 3/8 x 11/16 inches)

Mass:

Approx. 140 g (4.9 oz) including batteries



WRU-806B/62 UHF Synthesized Tuner Unit (62CE7)

Features

- Dedicated plug-in diversity receiver for MB-806A tuner base unit
- Operates within the range of 798 MHz to 822 MHz (TV channels 62 and 64)
- Auto channel assignment for extra receiver modules with self-detection and skipping of unusable channels
- Pre-programmed groups for inter-modulation free operation of multi-channel system
- AF, RF and transmitter's low-battery alarm indication by both LED and LCD to double check operating condition
- Use of SAW filters for exceptional rejection of unwanted signals while maintaining the best signal integrity of the desired signals
- Space diversity reception for dependable RF reception



Applicable Models

MB-806A UHF Tuner Base Unit

Specifications

Receiving channel:

1 channel

Receiving frequency:

798 MHz to 822 MHz

Oscillator:

1st: PLL synthesizer, 2nd: Crystal oscillator

De-emphasis:

50 μ s

Reference Deviation:

± 5 kHz deviation at 1 kHz modulation
(Max. deviation: ± 40 kHz deviation at 1 kHz modulation)

Selectivity:

60 dB or more at ± 250 kHz

Spurious rejection ratio:

70 dB or more

Frequency range:

70 Hz to 18 kHz (typical)

Signal-to-noise ratio:

60 dB or more at 60 dB μ RF input at reference deviation, A-weighted

RF muting level:

30 dB μ

Operating voltage:

DC 9 V

Current consumption:

225 mA or less

Dimensions (W x H x D):

57 x 26 x 122 mm
(2 1/4 x 1 1/16 x 4 7/8 inches)

Mass:

160.0 g (5.7 oz)

WRU-806B/67 UHF Synthesized Tuner Unit (67CE7)

Features

- Dedicated plug-in diversity receiver for MB-806A tuner base unit
- Operates within the range of 822 MHz to 862 MHz (TV channels 67 and 69)
- Auto channel assignment for extra receiver modules with self-detection and skipping of unusable channels
- Pre-programmed groups for inter-modulation free operation of multi-channel system
- AF, RF and transmitter's low-battery alarm indication by both LED and LCD to double check operating condition
- Use of SAW filters for exceptional rejection of unwanted signals while maintaining the best signal integrity of the desired signals
- Space diversity reception for dependable RF reception



Applicable Models

MB-806A UHF Tuner Base Unit

Specifications

Receiving channel:

1 channel

Receiving frequency:

838 MHz to 862 MHz

Oscillator:

1st: PLL synthesizer, 2nd: Crystal oscillator

De-emphasis:

50 μ s

Reference Deviation:

± 5 kHz deviation at 1 kHz modulation
(Max. deviation: ± 40 kHz deviation at 1 kHz modulation)

Selectivity:

60 dB or more at ± 250 kHz

Spurious rejection ratio:

70 dB or more

Frequency range:

70 Hz to 18 kHz (typical)

Signal-to-noise ratio:

60 dB or more at 60 dB μ RF input at reference deviation, A-weighted

RF muting level:

30 dB μ

Operating voltage:

DC 9 V

Current consumption:

225 mA or less

Dimensions (W x H x D):

57 x 26 x 122 mm
(2 1/4 x 1 1/16 x 4 7/8 inches)

Mass:

160.0 g (5.7 oz)

WRU-8N/62 UHF Synthesized Tuner Unit (62CE7)

Features

- Plug-in diversity receiver for MB-8N Tuner Base Unit
- Jog dial control for channel number/group selection
- Operates over a 24 MHz frequency band within the range of 798 MHz to 822 MHz (TV channels 62 to 64)
- LCD screen displays operating channel/frequency and RF level
- LED indicators display space diversity reception status, AF input status and a low battery warning of Sony transmitters
- Auto channel assignment of additional receiver modules for instant programming of interference-free multi-channel operation
- Automatically skips unusable channels and assigns open channels
- Space diversity reception for stable RF reception



Applicable Models

MB-8N Tuner Base Unit (U2)

Specifications

Receiving channel:

1 channel

Receiving frequencies:

798 MHz to 822 MHz

Local oscillators:

PLL synthesizer

Reference deviation:

±5 kHz deviation at 1 kHz modulation

(Maximum deviation: ±40 kHz at 1 kHz

modulation)

Signal-to-noise ratio:

60 dB or more (65 dB typical) at 60 dBμ RF input

at reference deviation, A-weighted

Selectivity:

60 dB or more at ±250

kHz detuned

RF squelch level:

10 dBμ, 20 dBμ, 30 dBμ or off

De-emphasis:

50 μs

Power consumption:

DC 5 V (supplied from MB-8N)

Dimensions (W x H x D):

56.0 x 30.7 x 149.0 mm

(2 1/4 x 1 1/4 x 5 7/8 inches)

Mass:

165 g (5.8 oz)

WRU-8N/67 UHF Synthesized Tuner Unit (67CE7)

Features

- Plug-in diversity receiver for MB-8N Tuner Base Unit
- Jog dial control for channel number/group selection
- Operates over a 24 MHz frequency band within the range of 838 MHz to 862 MHz (TV channels 67 to 69)
- LCD screen displays operating channel/frequency and RF level
- LED indicators display space diversity reception status, AF input status and a low battery warning of Sony transmitters
- Auto channel assignment of additional receiver modules for instant programming of interference-free multi-channel operation
- Automatically skips unusable channels and assigns open channels.
- Space diversity reception for stable RF reception



Applicable Models

MB-8N Tuner Base Unit (U2)

Specifications

Receiving channel:

1 channel

Receiving frequencies:

838 MHz to 862 MHz

Local oscillators:

PLL synthesizer

Reference deviation:

±5 kHz deviation at 1 kHz modulation

(Maximum deviation: ±40 kHz at 1 kHz

modulation)

Signal-to-noise ratio:

60 dB or more (65 dB typical) at 60 dBμ RF input

at reference deviation, A-weighted

Selectivity:

60 dB or more at ±250 kHz detuned

RF squelch level:

10 dBμ, 20 dBμ, 30 dBμ or off

De-emphasis:

50 μs

Power consumption:

DC 5 V (supplied from MB-8N)

Dimensions (W x H x D):

56.0 x 30.7 x 149.0 mm

(2 1/4 x 1 1/4 x 5 7/8 inches)

Mass:

165 g (5.8 oz)

SONY

Monitor Equipment

MDR-7502	374
MDR-7505	375
MDR-7506	376
MDR-7509HD	377

MDR-7502 Stereo Headphones

Features

- Designed to fit securely over the ear, these headphones ensure a high-degree of air-tightness and soundproofing
- The diaphragm, which is made of a high-molecule film, and the copper-clad aluminum voice coil reproduce high quality extended frequency sound
- Neodymium magnet is used to deliver deep bass and clear treble sound
- These headphones are equipped with a stereo unimatch plug which can be connected to a jack of either the mini or the phone type
- The headphone cord is a litz wire which reduces conductive loss at high frequencies

Supplied Accessories

Soft case (1)

Gold-plated unimatch plug adaptor (1)

Specifications

Type:

Supra-aural, closed

Driver units:

30 mm dia., dynamic type

Diaphragm:

PET

Magnet:

Neodymium

Impedance:

24 Ω at 1 kHz

Sensitivity:

100 dB/mW

Power handling capacity:

500 mW

Frequency response:

60 Hz to 18 kHz

Cord:

2 m cord with a gold-plated stereo mini plug cord

Mass (without cord):

150 g (5.2 oz)



MDR-7505 Stereo Headphones

Features

- Professional monitoring headphones for DJ, remix, and studio
- Swivel mechanism allows easy single sided monitoring in various wearing positions
- Round design of ear pads allows the DJs to listen in various positions, with consistent audio quality
- Acoustical characteristics is designed to position sound image very close to the ears, thus, enabling easy sound monitoring in noisy environment
- 40 mm driver unit for high quality sound
- Neodymium magnet for powerful bass and clear treble sound
- Reversible earcup design for easy single sided monitoring
- Coiled, LC-OFC cord for high quality transmission
- Screw type gold plated stereo unimatch plug for secure connection
- Convenient folding design

Supplied Accessories

Soft case (1)

Gold-plated unimatch plug adaptor (1)

Specifications

Type:

Supra-aural, closed

Driver units:

40 mm dia., dynamic type

Diaphragm:

PET

Magnet:

Neodymium

Impedance:

40 Ω

Sensitivity:

106 dB/mW

Power handling capacity:

1,000 mW

Frequency response:

10 Hz to 25 kHz

Cord:

Coiled, single sided, 1 to 3 m LC-OFC litz cord with a gold plated stereo mini plug

Headband:

Wide single headband (folding mechanism)

Mass (without cord):

220 g (7.7 oz)



MDR-7506 Stereo Headphones

Features

- Professional monitoring headphones
- Comfortable, anatomic design (circum aural headphones, earcup covering the entire ear)
- 40 mm driver unit for high quality sound
- Neodymium magnet is used to deliver deep bass and clear treble sound
- Utilising diaphragms constructed of 16 μm high-molecule film and copper-clad aluminum voice coil, these headphones deliver high quality sound along a wide frequency range
- The headphone cord is an oxygen-free copper litz wire which provides maximum conductivity
- The coiled headphone cord extends user's action radius to 3 metres
- Useful clicking scales on the slide bar
- Convenient folding design
- Self-closing mechanism prevents sound leakage when headphones are taken off

Supplied Accessories

Soft case (1)

Gold-plated unimatch plug adaptor (1)

Specifications

Type:

Circum-aural, closed

Driver units:

40 mm dia., dynamic type

Impedance:

63 Ω at 1 kHz

Sensitivity:

106 dB/mW

Power handling capacity:

1000 mW

Frequency response:

10 Hz to 20 kHz

Cord:

Coiled, single sided, 1 to 3 m OFC litz cord with a gold-plated stereo mini plug

Mass (without cord):

230 g (8.1 oz)



MDR-7509HD Stereo Headphones

Features

- Professional monitoring headphones
- Resists high power input up to 3000 mW
- Comfortable, auranomic design (circum aural headphones, earcup covering the entire ear)
- 50 mm driver unit for high quality sound
- Neodymium magnet for powerful bass and clear treble sound
- Amorphous diamond evaporated diaphragm for natural sound reproduction
- Reversible earcup design for easy single sided monitoring
- Coiled, LC-OFC class 1 litz cord for minimum signal transmission loss
- Screw-type gold plated stereo unimatch plug for secure connection
- Convenient folding design
- Self-closing mechanism prevents sound leakage when headphones are taken off

Supplied Accessories

Soft case (1)

Gold-plated unimatch plug adaptor (1)

Specifications

Type:

Circum-aural, closed

Driver units:

50 mm dia., dynamic type

Diaphragm:

Amorphous diamond evaporated

Magnet:

Neodymium

Impedance:

24 Ω

Sensitivity:

107 dB/mW

Power handling capacity:

3,000 mW

Frequency response:

5 Hz to 80 kHz

Cord:

Coiled, single sided, 1 to 3 m LC-OFC class1 litz cord with a gold-plated stereo mini plug

Headband:

Wide single headband (folding mechanism)

Mass (without cord):

300 g (10.5 oz)



SONY

Digital Signage Solutions

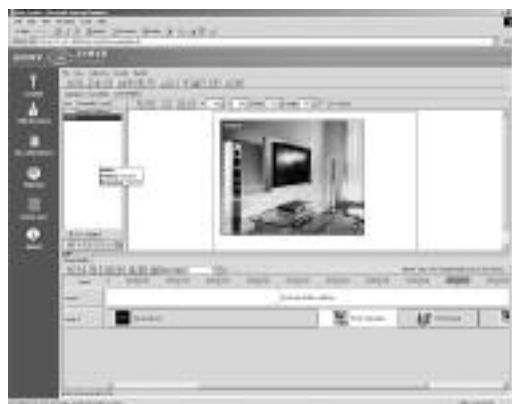
Ziris Create	380
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Ziris Create BZSQ-C001

Ziris Create Lite Single Software License

BZSQ-C101

Ziris Create Single Software License



Ziris-Create Lite

Entry level applications where simple single layer messaging using the BKM-FW50 or BZSQ-VIEW LITE player devices are used.

Entry-level application playlist creation software, for use and supporting the BKM-FW50 and BZSQ-V001 Ziris View Lite networked players only.

The BKM-FW50 is an IP addressable Streaming Receiver Adaptor for the Sony Public Display FWD series. Ziris Create supports the features "Store Local" and "Local play" of the BKM-FW50, using the standard Ziris Create channels and default content user interface.

ZIRIS VIEW is application software, operating on either Windows XP or MAC platform, allowing the timely play out of single layer scheduled playlists, when authored within Ziris Create Lite.

BZSQ-C001 Ziris Create Lite

Description

Ziris Create Lite, Entry Level content authoring software.

Software Platform

Windows XP

Web Browser Based

Multiple user and remote log in. Password protection for security.

User Friendly Interface

Ziris Create Lite is simple to operate, the GUI is informative, unclustered and navigation to create and control is easily performed.

Drag and Drop Operation

The use of drag and drop of media to create a playlist supports the entire concept of fast, efficient and effective workflow processes.

Simple Scheduling

No schedule timeline or schedule table is available.

Default content is set by dragging the content onto the default content field.

A Slide Show dialogue allows users to select content from the collections and add them to the Slide Show. The order of the images and video can be changed using the "Move Up" and "Move down" buttons. A preview of the Show is shown along the bottom of the dialogue. The content currently selected in the collection may be previewed.

One Platform

Ziris Create Lite offers one platform for handling different types of content such as multiple format support, video, graphics and audio. With no secondary systems required, this makes it's so much simpler to use. What's more, unlike other systems Ziris Create makes a copy of the content to ensure it's always available to the operator.

Simple Media Storage

Media is stored locally and managed on a PC. Files are stored by file type and are user configured – so you know exactly where to find them. It's totally intuitive and simple to use.

Thumbnail File Identification

The use of thumbnails to identify content allows 'at a glance' recognition of the media within the collections and ready for use.

Simple Transfer

Content is transferred and stored locally. No pre-rendering is required, thus changes are simple and fast.

BZSQ-C101 Ziris Create

As above but advanced software for large-scale scaleable systems utilising various media formats, on a number of layers and positions, and flexible scheduling tools.

Available network players includes:

- NSP-1 Dedicated Network Player (6 Layers)
- BZSQ-V001 Ziris View Lite (4 Layers)
- BZSQ-V101 Ziris View SD (10 Layers)
- BZSQ-V501 Ziris View HD (10 Layers)

Features

Ziris Create has three core functions;

- To able content ingest
- To able user content file management
- To able content play list and schedule authoring.

Ziris Create takes a simple concept of an Administrator and an Author, and brings them to an IP content authoring, publishing & distribution environment. Both Administrator and Author function work together to develop collections of content and deliver them to a distributed network of devices for play out.

The Administrator function allows the user to allocate access privileges and define further User/Author roles.

The Administrator function also allows the user to create groups of terminals to which similar content can be developed and delivered. In this way a Group could be all terminals within a retail complex, or all terminals within specific retail areas. Groups are defined on a user basis and in line with the users needs.

The Author function allows users to pull together content from different sources into a single collection. The media within a collection can then be customised with text and graphics. Text can be formatted in terms of font, position, colour size etc and graphics added and positioned for maximum effect within the media.

The whole process is simple to understand and complete. Users simply drag and drop content to a timeline and much like basic editing software, define the times at which graphics and text should appear. Sophisticated media content can be created easily by combining graphics, media and text.

Once created the item is validated i.e. checked for continuity, and consistency and a play out timeline is created for the group of devices. The Author collates media content to the timeline to create a play out schedule. The play out schedule is then uploaded to the remote play out devices manually, automatically, or at a predefined time. The system provides an effective colour-coding scheme to show the stage of the upload process, and whether ultimately, it has been successful.

Core Application Features

- Web Infrastructure – can be used local (on PC) and Remote (Server)
 - Secure Account Login and User Account Management
 - Software Licensing by number of devices
 - Multi-Language Support (requires translation)
 - Dual screen support
- Official release: April 2005

Content Ingest

- Importing of content into flexible directory structure
- Manual or automatic 'hot folder' imports

Scheduling

- Drag-and-drop on to channel timeline for scheduling single playlists
- Scheduled or Immediate payout (NSP) and Default playlists
- Campaign scheduling wizard for scheduling daily payout between a start and end date, across multiple channels. Can also select days of the week.

Content Management

- Management of video, images, text and playlists in folders
- Export of content and playlists
- Export of Ziris-View playlist into MOV video file

Playlist Authoring

- Playlist authoring for a large variety of screen formats, sizes and orientations (including portrait and widescreen)
- Support for multiple network player types:
NSP-1
BZSQ-V001 Ziris View Lite
BZSQ-V101 Ziris View SD
BZSQ-V501 Ziris View HD
- Automatic playlist creation for simple presentations
- WYSIWYG Layout and text editors for creating and previewing custom designs
- Ability to combine playlists
- Portrait mode playlist creation for NSP-1 and Ziris-View

Channel Management

- Grouping of devices into channels to facilitate scheduling and upload to multiple devices
- Single click upgrade to Ziris Transfer

Content Upload

- Simple upload option for transferring content and schedules to devices (either directly or through Ziris-Transfer)
- Colour-coding scheme on timeline for displaying upload status
- Batch upload using scheduling wizard, with detailed status reporting

Dynamic Content Management

- Dynamic Pull – HTML support for Ziris-View and NSP-1
- Identification of Live Video Input for NSP-1 in Video Layer
- Dynamic Push – Local 'Hot-Folder' dynamic text support for Ziris View
- Push based MPEG-4 Video Streaming for Ziris-View & NSP-1 (allow authoring of playlists to reference video server)

System Requirements

Intel P4 2.8GHz, 1GB DDR, 120GB HDD, Windows XP Professional.

Monitor 1024 x 768 resolution, true colour

Ziris Transfer

BZSQ-T050

Features

Ziris Transfer provides File transfer over 'reliable' distribution networks such as simple LAN. (FTP). These are typically IT infrastructure solutions that are framed around the more efficient use of the TCP network protocol for massive file distribution to many points. The general file transfer technologies have an advantage as they provide simple integration into existing IT networks, but at the cost of a less efficient method of distributing content for large numbers of receivers. The standard File Transfer Protocol is the most well known and most widely implemented approach as it is free (in terms of knowledge and technology) but does have a cost associated in terms of performance, efficiency and cost of development to make reliable.

Core Application Features

- Web Infrastructure – can be used local (on PC) and Remote (Server)
- Secure Account Login and User Account Management
- Software Licensing by number of devices
- Multi-Language Support

Transfer Status Monitoring

- Dynamically updates transfer status

FTP and Multicast Transfer

- Unicast FTP or Multicast using Shrimp FEC technology
- Transfer immediately or within a time window

Configuration

- Zero Device Configuration (handled in Ziris-Create)

FTP Transfer

- FTP Transfer to channels defined in Ziris Create
- No additional channel configuration required in Ziris Transfer
- Automatic retry of failed transmissions
- Transfer immediately or during time window

System Requirements

Intel P4 2,8GHz, 512MB DDR, 80GB HDD, Windows XP Professional.

Monitor 1024 x 768 resolution, true colour



Transfer Status Monitoring

- Dynamic status updates on all transfers
- Search transfers according to status, job name, destination, device name and date
- Fine tune settings: record archive period and content deletion

Status in Ziris Manage

- Updates Ziris Manage with status from Ziris Transfer
- Number of failed transfers

HTTP Upload Support

- NSP1 support for HTTP upload

Ziris Manage

BZSQ-M001

Ziris Manage Lite Single
Software License

BZSQ-M101

Ziris Manage Single
Software License



Invest in a digital signage solution and you'll want to know everything is running smoothly. Ziris Manage can offer you such reassurance. That's because as device management and monitoring software, it consistently keeps a close eye on the whole process. And should a problem arise, you can act quickly to put it right.

Ziris Manage monitors play out devices such as the NSP-Series, BMM-FW Series and Ziris View series to report and provide a live status of their condition. This includes 'as-run' logs from each unit, allowing you to review and confirm the device operation. Ziris Manage provides device reporting on:

- Unit Configuration
- Unit Status
- Content 'as-run' Logging (Ziris Manage Only, Not Ziris Manage Lite)

Ziris Manage also monitors devices such as Sony plasma screens, LCD monitors and projectors. Information such as whether the unit is switched on, which video input is chosen and projector lamp hours is invaluable if you're concerned about your mission critical information communication devices and giving them the preventative maintenance they deserve.

BZSQ-M001 Ziris-Manage Lite

Entry level applications where simple monitoring and control of BKM-FW50, BZSQ-V001 player devices, LCD and Plasma Devices via the BKM-FW31/2 and IP enabled projectors.

BZSQ-M101 Ziris-Manage

Advanced software for large-scale scaleable systems utilising various Networked Players, Displays, Projectors.

Features

Ziris Manage is a device management and monitoring software. It monitors play out devices such as the NSP-Series and Ziris View to report and provide a live status of their condition, including 'As Run' logs, device reporting, configuration, status, logging etc. Other devices it is able to monitor and manage include plasma's and LCD displays and projectors.

Core Application Features

- Web Infrastructure – can be used local (on PC) and Remote (Server)
- Secure Account Login and User Account Management
- Software Licensing by number of devices
- Multi-Language Support

Configuration

- Registration and management of devices for monitoring
- Screens and network players can be monitored in groups or individually.
- Configuration of device parameters – NSP-1

Status

- Real-time status reporting for digital signage devices, Ziris-View, NSP-1, Sony Network Projector
- Indicates whether network players, plasmas, monitors and projectors are switched on
- Displays current media playout information, download status and remaining disc space for network players
- Alerts of any errors

Logging

- Maintains details of registered playout devices and their associated displays

Firmware Upgrade

- Upgrade of device firmware for one or many NSP-1
- Immediate or scheduled upgrade

Remote Device Control

- Can schedule reboot and sleep times for NSP-1
- Can switch input channels, switch on/off through RS232 of playout device
- Schedule reboot and sleep times for Ziris View

- Control and status viewing of Scion video switches

Ziris Transfer Integration

- Ziris Transfer status indication within device tree
- Viewing Content Store on Devices
- View of Media/content on play out device (no modification of data will be possible)
- Error Notification
- SMS or E-mail notification of error status

System Requirements

Intel P4 2.8GHz, 512MB DDR, 80GB HDD, Windows XP Professional.

Monitor 1024 x 768 resolution, true colour

Ziris View

BZSQ-V001

Ziris View Lite, Single layer player when content playlist authored by BZSQ-C001, or up to 4 layers when playlist authored by BZSQ-C101, Standard Definition Play-out Application Software.

BZSQ-V101

Ziris View SD, 10 layer, for use with BZSQ-C101 only. Standard Definition Payout Application Software.

BZSQ-V501

Ziris View HD, 10 layer, for use with BZSQ-C101 only. Standard and High Definition Payout Application Software.

Features

Ziris View is a software application that is designed to turn a standard PC into a payout unit for Digital Signage applications. Ziris View will manage the payout of video, audio and graphically content, as described by a play-list and is analogist to the Sony NSP-1 payout server. The Ziris View player software supports the same basic functions and features when compared to dedicated players however it can provide a number of operational features that will give users business advantages. These include high quality graphical output display, providing in addition to video, real time information, it is particularly versatile of formats and remains very flexible dependant on customer requirements.

Ziris now offers users Digital Signage messaging with real High Definition pictures, using a wide range of HD play out solutions and displays.

Unlike that of many competitors, High Definition is nothing new to Sony - we have been working in this field for over 20 years. It is only recently that High Definition has become a worldwide phenomenon, where the technology has changed and evolved in production, distribution and for the consumer. High Definition will revitalise the entire television industry with innovation, new revenues and excitement, and that includes Digital Signage solutions for Point of Sale, Information and Entertainment.

Keen to add value in a fast-moving, fragmented marketplace, many advertisers around the world have put High Definition at the top of their agendas, HD pictures provide an exceptional viewing experience on the new generation of HD-compatible Sony displays that are universally available.

Multi layer PC based payout device

- Three versions

BZSQ-V001

Ziris View Lite, 4 layer, Play-out Application Software

BZSQ-V101

Ziris View SD, 10 layer, Payout Application Software

BZSQ-V501

Ziris View HD, 10 layer, Payout Application Software

- Scheduled or default content
- Flexible format support, including: mov, mpg, avi, flash, bmp, jpg, gif, H264
- Portrait mode

Dynamic Pull (HTML) - BZSQ-V101 and BZSQ-V501 only

- Ziris View pulls HTML content from remote URL
- Configurable refresh rate

Dynamic Push - BZSQ-V101 and BZSQ-V501 only

- Dynamic update of text within a playlist

Live Video Input - BZSQ-V101 and BZSQ-V501 only

- Input through specified video input card

Integration with Ziris Manage

- Current status
- As run logs collection

Display Control

- Controls plasma via RS232: power, volume & input
- Supports various Sony displays and projectors

This list continues to change as new models are introduced

Remote reboot

- View PC can be rebooted remotely via Ziris Manage

System Requirements

Operating System

Microsoft® Windows® XP SP2 or MAC OS 10.43 G4

Specification 1

Operating System

Microsoft® Windows® XP SP2

HDD

80 GB Minimum 7200 RPM

RAM

512 MB Minimum

Graphics Card

Minimum XGA (1024 x 768), WXGA if 16:9 Displays are used, Capable of true colour (32 Bit), 64 MB Minimum Graphics Memory,

Intel Graphics Media Accelerator 900 or 950

ATI RADEON™ chipset graphics card

PCIe or AGP adapter type

64MB minimum graphics memory

such as X300, X600, X700, X800

Software Environment

Intel® Pentium® 4 or Intel Celeron, Non Hyper Threaded

3.0 GHz min

QuickTime 6.5 Player

QuickTime MPEG2 Support

Java™ 2 SDK 1.4.2

Network Connection

Specification 2

Operating System

MAC OS 10.43 G4

HDD

80 GB Minimum

RAM

512 MB Minimum

1.42GHz Power PC min

QuickTime 6.5 Player

QuickTime MPEG2 Support

Java™ 2 SDK 1.4.2

Network Connection

NSP-1 Network Player

Features

The NSP-1 provides local storage and playout within Digital Signage applications and manages the presentation of up to five simultaneous image layers, including graphics, video, text and Flash content. For added flexibility, video can be played out from the hard drive of the NSP-1 or merged with other content layers from an external video feed. An audio channel can be used for background music or narration in addition to the video soundtrack. Its flexibility, video output quality, compact size and reliability ensures peace of mind when deployed in mission critical environments.

High Quality Graphics and Text

The NSP-1 supports a variety of graphics formats including full colour bitmaps (.bmp) as well as JPEG, Macromedia Flash™ and HTML. Small bitmap images such as logos can be positioned anywhere within the display area. Text can be specified in any colour and position on screen, with optional scrolling or flashing effects added as required.

Excellent Video Quality

High bit rate MPEG-2 compression ensures clear, true-to-life DVD quality video images.

Portrait Mode

Content can be presented in a choice of portrait or landscape modes to suit display orientation.

Selectable Output Resolution and Aspect Ratio

Supplied Accessories

AC adapter and AC cable
Stand for desktop mounting in vertical position
Operation manual (downloadable from the NSP-1 HDD)

Optional Software

Ziris Create, File Management, Authoring and Scheduling Software
Ziris Transfer, Content distribution Software
Ziris Manage, Play-out Device and Display Management software

Specifications

General

Dimensions (W x H x D):

210 x 44 x 167 mm (8 3/8 x 1 3/4 x 6 5/8 inches)

Mass:

Approx. 1.5 kg (3 lb 1 oz)

Power:

Power consumption; Approx. 45 W
Power supply: DC 13.5 V provided from an AC adapter
Operating temperature +5 to +40°C (+42 to +104°F)
Storage temperature -20 to +55°C (-4 to +131°F)

Hard Disc Drive:

40 GB

Output (Media Formats)

MPEG-2 Video:

MPEG-2 MP@ML, 4.0 Mb/s - 9.0 Mb/s

Audio:

MPEG-1 Audio Layer II 2 channels (fixed), 256 kb/s, 48 kHz

Graphics:

Bitmap (.bmp), JPEG (.jpg), FLASH (.swf), HTML (.htm or .html)

Text:

Bitmap (.bmp), Text (.txt)



Output image resolution and aspect ratios can be specified as:

- 4:3 RGB: VGA, SVGA, XGA
- 16:9 RGB: WVGA
- Composite Video: NTSC, PAL

Dedicated Audio Track

The dedicated audio track is ideal for adding background music or narration to accompany video and other graphic presentation elements.

Browser-Based Remote Setting & Scheduling

NSP-1 functions can be controlled via a connected PC and web browser.

Audio:

Linear Audio (.wav), MP3 (.mp3)
A/V In NTSC, PAL, Stereo Audio

Output (Screen Image)

Analogue:

RGB VGA (640 x 480 pixels), WVGA (848 x 480 pixels),
SVGA (800 x 600 pixels), XGA (1024 x 768 pixels)

Composite Video*:

NTSC (720 x 480 pixels), PAL (720 x 576 pixels)

Screen:

Rotation Landscape, Portrait (+90°, -90°)

Interface

Video OUT:

Analogue RGB, HD D-sub 15-pin (female) x1, Composite
(RCA phono type x1)

Audio OUT:

Stereo RCA phono type x2, analogue unbalanced

Video IN:

Composite (RCA phono type x1)

Audio IN:

Stereo RCA phono type x2, analogue unbalanced

Network:

10/100Base-T Ethernet, RJ-45 modular jack x1
PCMCIA Type II x1
USB USB 1.1 x2
Serial RS-232C, D-sub 9-pin (male) x1,
GPI D-Sub 25-pin (female) x1

Operating System and Network:

Operating system Linux

Supporting protocols:

TCP/IP, HTTP

Public Displays & Accessories

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FWD-32LX2F S/B 32" LCD Public Display

Features

•High resolution widescreen displays (1366x768) with 16.77 million displayable colours •Durable and elegant acrylic bezel design (available for the Silver model)
•HD-Ready •Great picture quality – very high brightness (500 cd/m²) combines with 1300:1 contrast ratio to deliver incredibly bright, clear images •Integrated high performance scan converter – for extra smooth playback of video or PC signals •Dual option slots for installation of add-on boards (first slot is pre-installed with BKM-FW10, second slot is pre-installed with BKM-FW20^(*)) •Dual HDMI inputs •Includes built-in audio amplifier to drive optional loudspeakers •Special menu for hotel installation with advanced settings^(*) •True Colour Control enables very precise colour adjustments; ideal for displaying company logo or trademarks just as they should be. Using the colour palette on the screen, the saturation and the hue of either red, yellow, green, blue can be adjusted individually without affecting other colours

*1 Monitor Control Adaptor (RS232C/Control-S)

*2 Please contact your local Sony dealer for details



Supplied Accessories

Power cable
Instruction manual
Component video HD15/RCA cable
BNC/RCA conversion adaptor
Cable holder
Remote controller (RM-FW001)
Batteries
Warranty card

Optional accessories

Speakers
Table Top Stand
Video/S Video I/O adaptor
5BNC (Component/RGB) Input Adaptor
RGB/Component Active Through Adaptor
Network Management Adaptor
Contents Player/Streaming Receiver Adaptor

Specifications

Panel

LCD/PDP
LCD
Size
32V
Active Area (w x h)
698 x 392 mm
Resolution
WXGA 1366 x 768
Colours
16.7million
Viewing Angle (h/v)
176° / 176°
Response Time
8 msec (G to G)
Brightness
500 cd/m²
Contrast
1300 : 1

Input connectors

PC
Analogue (HD15)
Digital (HDMI x2)
Video
Video (Composite) (BNC)
S Video (Mini DIN4)
Component (HD15)
DigitalVideo (HDMI x2)

Audio

RCA (L/R)
Stereo mini

Control

RS232C / Control S

Output connectors

PC
n/a
Video
Video(Composite) (BNC)
S Video (Mini DIN4)
Audio
n/a
Speaker out
L/R
Control
Control S
Maximum Resolution
WXGA 1360 x 768
General
Video Signal
NTSC / PAL / SECAM /
NTSC4.43 / PAL-M / PAL60 / PAL-N,
Video (Composite) / S Video / Component
Speaker output
7W + 7W

Power

Requirements
AC100–240V, 50/60Hz
Consumption
120 W (typical)
Dimension (w x h x d)

F model
796 x 486 x 107 mm
X model
802 x 492 x 107 mm

Mass

F model
approx. 16.0 kg
X model
approx. 17.0 kg

Function Slot

2

PinP/P&P

No / Yes

Multi Zooming (Multi Display)

2x2, 3x3, 4x4 with the selection
of tiled image or Window image

FWD-40LX2F S/B 40" LCD Public Display

Features

•High resolution widescreen displays (1366x768) with 16.77 million displayable colours •Durable and elegant acrylic bezel design (available for the Silver model)
•HD-Ready •Great picture quality – very high brightness (500 cd/m²) combines with 1300:1 contrast ratio to deliver incredibly bright, clear images •Integrated high performance scan converter – for extra smooth playback of video or PC signals •Dual option slots for installation of add-on boards (first slot is pre-installed with BKM-FW10, second slot is pre-installed with BKM-FW20^(*)) •Dual HDMI inputs •Includes built-in audio amplifier to drive optional loudspeakers •Special menu for hotel installation with advanced settings^(*) •True Colour Control enables very precise colour adjustments; ideal for displaying company logo or trademarks just as they should be. Using the colour palette on the screen, the saturation and the hue of either red, yellow, green, blue can be adjusted individually without affecting other colours

*1 Monitor Control Adaptor (RS232C/Control-S)

*2 Please contact your local Sony dealer for details



Supplied Accessories

Power cable
Instruction manual
Component video HD15/RCA cable
BNC/RCA conversion adaptor
Cable holder
Remote controller (RM-FW001)
Batteries
Warranty card

Optional accessories

Speakers
Table Top Stand
Video/S Video I/O adaptor
5BNC (Component/RGB) Input Adaptor
RGB/Component Active Through Adaptor
Network Management Adaptor
Contents Player/Streaming Receiver Adaptor

Specifications

Panel

LCD/PDP
LCD
Size
40V
Active Area (w x h)
885 x 498 mm
Resolution
WXGA 1366 x 768
Colours
16.7million
Viewing Angle (h/v)
178° / 178°
Response Time
8 msec (G to G)
Brightness
500 cd/m²
Contrast
1300 : 1

Input connectors

PC
Analogue (HD15)
Digital (HDMI x2)
Video
Video (Composite) (BNC)
S Video (Mini DIN4)
Component (HD15)
Digital Video (HDMI x2)

Audio

RCA (L/R)
Stereo mini

Control

RS232C / Control S

Output connectors

PC
n/a
Video
Video(Composite) (BNC)
S Video (Mini DIN4)

Audio

n/a

Speaker

L/R

Control

Control S

Maximum Resolution

WXGA 1360 x 768

General

Video Signal
NTSC / PAL / SECAM /
NTSC4.43 / PAL-M / PAL60 / PAL-N,
Video (Composite) / S Video / Component

Speaker output

7W + 7W

Power

Requirements

AC100-240V, 50/60Hz

Consumption

200 W (typical)

Dimension (w x h x d)

F model

988 x 591 x 125 mm

X model

994 x 597 x 125 mm

Mass

F model

approx. 25.0 kg

X model

approx. 26.0 kg

Function Slot

2

PinP/P&P

No / Yes

Multi Zooming (Multi Display)

2x2, 3x3, 4x4 with the selection
of tiled image or Window image

FWD-42PV1 S/B 42" WVGA Plasma Public Display

42 inch WVGA Plasma Public Display. The best partner to get your message across to your target audience.

Features

- High picture quality – very high brightness (1500 cd/m²) combines with 10000:1 contrast ratio to deliver incredibly bright, clear images
- Integrated high performance scan converter – for smooth playback of video signals (up to HD format) and PC (up to UXGA resolution)
- Includes built-in audio amplifier to drive optional loudspeakers
- Remote management – via RS232C and Control-S control ports
- Long life – durable design for extended product lifetime
- Screen burn protection – screen saver, picture orbiting, auto-dimmer and picture inversion help prevent burn-in



Specifications

Panel

- Resolution
852 x 480 pixels
- Panel Brightness
1500cd/m²
- FOS Brightness
500cd/m²
- Contrast
10.000:1 (dark room)
- Pixel Pitch
1.08 x 1.08 mm
- Visual Area (W/H)
920 x 518 mm
- Colours
1.07 billion (simultaneously)

Colour System

- NTSC / PAL / SECAM / PAL-M / PAL-N / NTSC4.43 / PAL60

Sampling Rate

- 13.5 to 140 MHz

Inputs and Outputs

INPUT 1

- Digital Video
DVI-HDCP
- AUDIO
Stereo mini jack, 500 mV RMS, high impedance

INPUT 2

- RGB
D-sub
15-pin, 0.714 V p-p non-composite, 1.0 Vp-p composite
- Component Y
1.0 V p-p composite
- U/V
0.7 V p-p non-composite

AUDIO

- Stereo mini jack, 500 mV RMS, high impedance
- OPTION 1 (BKM-FW10)
VIDEO IN/OUT
BNC
1.0V p-p +/-2 dB sync negative
75 Ω automatic termination, loop-through out
- S VIDEO IN/OUT
Mini DIN 4-pin
- Y
1.0 V p-p +/-2 dB sync negative
- C
0.286 V p-p +/-2 dB sync negative (NTSC)
0.3 V p-p +/-2 dB sync negative (PAL)
- AUDIO L/R
Pin jack x2
- Speaker OUT
6 Ω , 7W+7W
- Audio OUT
Pin Jack x2
- Remote (RS-232C)
D-sub 9-pin
- Control S (I/O)
Mini jack
- AC OUT
up to 0.25 A or up to 30 W
- General
Power requirements
AC 100 to 240 V, 50 / 60 Hz, 3.5 A (max.)
- Power consumption
260W (typ.)
- Operating temperature
0 to 35°C (32 to 95°F)
- Storage temperature
-10 to 40°C (14 to 104°F)
- Atmospheric pressure (operating)
800–1100 hPa

Humidity

- 20 to 90 %, no condensation
- Dimensions
1033 x 631 x 121 mm
- Mass
approx. 29 kg

FWD-42PX2 S/B 42" WXGA Plasma Public Display

42" WXGA Plasma Public Display (HD Ready).

The ideal partner for all types of professional applications.

Features

- Ideal for digital signage, the FWD-42PX2 is an eye catching 42" plasma display that uses new PDP panel technology for top level brightness and contrast. Pre-fitted BKM-FW10 video input card and DVI
- Great picture quality - low-reflection screen coating combines with high brightness (1200cd/m²) and high contrast (10000:1) to deliver bright, clear images
- Integrated High-Performance scan converter - for smooth playback of video signals (up to HD format) and PC (up to UXGA resolution)
- Screen burn protection - screen saver, picture orbiting, selectable dimmer and picture inversion help prevent burn-in
- Remote management - via RS232C and Control-S control ports
- Flexible installation options - bottom connector panel, optional table stand and wall mount brackets.



Specifications

Panel

Resolution
1024 x 768 pixels

Panel Brightness
1200cd/m²

FOS Brightness
450cd/m²

Contrast
10,000:1

Pixel Pitch
0.90 x 0.676 mm (non-square pixels)

Active Area (W/H)
920 x 518 mm

Visual Area (W/H)
42-inch / 1056 mm measured diagonally

Colours
1.07 billion (simultaneously)

Colour System

NTSC/PAL/SECAM/ PAL60/PAL-M/
PAL-N/NTSC4.43

Sampling Rate

13.5 to 140 MHz

Inputs and Outputs

INPUT 1

Digital Video
DVI-HDCP

AUDIO

Stereo mini jack, 500 mV RMS,
high impedance

INPUT 2

RGB

0.7 V p-p non composite,
1.0 V p-p composite, 75 Ω

U/V

0.7 V p-p non composite (U/V),
1.0 V p-p composite (Y), 75 Ω

Audio

Stereo mini jack, 500 mV rms.,
high impedance

OPTION 1 (BKM-FW10)

Composite In

BNC, 1.0 V p-p +/-2 dB, sync negative,
75 Ω automatic termination

Y/C In

Mini DIN, 4-pin,

Y: 1.0 V p-p +/-2 dB, sync negative,
75 Ω automatic termination

C: 0.3 V p-p (PAL), 0.286 V p-p (NTSC),
+/-2 dB, sync negative, 75 Ω

Audio In

-5 dBu, 500 mV rms., high impedance

Composite Out

BNC, loop-through

OPTION2 (free)

Available for BKM-FW10/11/12

Audio OUT

Stereo mini jack, 500 mV rms., high impedance

Speaker OUT

6 Ω , 7W+7W (L/R)

Control S

In/Out

Remote (RS-232C)

D-sub 9-pin

General

Power requirements

AC 100 to 240 V, 50/60 Hz 1.5A to 3.7A (Max.)

Power consumption

330 W (Max.)

Operating temperature

0 to 35 °C (32 to 95 °F)

Storage temperature

-10 to 40 °C (14 to 104 °F)

Atmospheric pressure (operating)

800~1100 hPa

Humidity

20 to 90 %, no condensation

Dimensions

1033 x 631 x 121 mm

Mass

approx. 30 kg

FWD-50PX2 S/B 50" WXGA Plasma Public Display

50" WXGA Plasma Public Display (HD Ready).

The ideal partner for all types of professional applications.

Features

- High resolution widescreen display (1366x768) with 1.07 billion displayable colours •60,000 hour panel life – 3 times longer than the previous FWD-50PX1 •Great picture quality – very high FOS brightness (450 cd/m²) combines with superb 10000:1 contrast ratio to deliver incredibly bright, clear images •HD resolution capable – feed the FWD-50PX2 with HD video for extra clarity and bigger impact •Integrated high performance scan converter – for smooth playback of video signals (up to HD format) and PC (up to UXGA resolution) •Can be used in both landscape and portrait orientation
- Dual option slots – for installation of add-on boards. First slot is pre-installed with BKM-FW10 card



Specifications

Panel

- Resolution 1366 x 768 pixels
- Panel Brightness 1000cd/m²
- FOS Brightness 450cd/m²
- Contrast 10.000:1
- Pixel Pitch 0.81 x 0.81 mm
- Active Area (W/H) 1106 x 622 mm
- Visual Area (W/H) 50-inch / 1270 mm measured diagonally
- Colours 1.07 billion (simultaneously)

Colour System

- NTSC/PAL/SECAM/ PAL60/PAL-M/ PAL-N/NTSC4.43

Sampling Rate

- 13.5 to 140 MHz

Inputs and Outputs

INPUT 1

- Digital Video DVI-HDCP
- AUDIO Stereo mini jack, 500 mV RMS, high impedance

INPUT 2

- RGB 0.7 V p-p non composite, 1.0 V p-p composite, 75 Ω
- U/V 0.7 V p-p non composite (U/V), 1.0 V p-p composite (Y), 75 Ω

Audio

- Stereo mini jack, 500 mV rms., high impedance

OPTION 1 (BKM-FW10)

- Composite In BNC, 1.0 V p-p +/-2 dB, sync negative, 75 Ω automatic termination

Y/C In

- Mini DIN, 4-pin,
- Y: 1.0 V p-p +/-2 dB, sync negative, 75 Ω automatic termination
- C: 0.3 V p-p (PAL), 0.286 V p-p (NTSC), +/-2 dB, sync negative, 75 Ω

Audio In

- 5 dBu, 500 mV rms., high impedance

Composite Out

- BNC, loop-through

Audio OUT

- Stereo mini jack, 500 mV rms., high impedance

Speaker OUT

- 6 Ω , 7W+7W (L/R)

Control S

- In/Out

Remote (RS-232C)

- D-sub 9-pin

General

Power requirements

- AC 100 to 240 V, 50/60 Hz 3.7 to 1.5A

Power consumption

- 440 W (Max.)

Operating temperature

- 0 to 35 °C (32 to 95 °F)

Storage temperature

- 10 to 40 °C (14 to 104 °F)

Atmospheric pressure (operating)

- 800–1100 hPa

Humidity

- 20 to 90 %, no condensation

Dimensions

- 1256 x 753 x 112 mm

Mass

- approx. 44 kg

BKM-FW50 Digital Signage Board

Streaming Receiver Adaptor - Discover the World of Digital Signage.

Features

If you want to get your message across, this powerful digital signage board is perfect for showing impactful still images or video clips. Not only is it easy to install and use, it's cost effective - saving you money and time. Bring your own message to the public!

This innovative technology is remarkably flexible. You can edit and save your content on an optional CompactFlash card and it will play on your digital signage instantly. In addition, you can stream still images and video clips from a web server or download them onto your storage media for play, without worrying about network traffic. Only a web browser is needed to operate this system, thanks to its HTML embedded design, helping you even further to communicate your messages at low cost. Extremely reliable compared to HDD and/or PC based solutions.



- 1- List Play
- 2- Time Table
- 3- No black screen insertion when JPEG image changing on Slide Show
- 4- Support LX2 series
- 5- Others
 - Support MPEG 480i + Auto detection of video MPEG video format Auto/480i/480p/576p
 - Check CF Remaining Amount
 - Play Contents under Sub-folders on Compact Flash Memory
 - Rename files on Compact Flash Memory
 - Background Music: Can be set as Folder basis
 - Display Message at booting-up and player idle, On/Off
 - Slide Show > Interval time setting : add 20/30/40sec
 - Background Colour

Applicable Models

FWD-32LX2 LCD Display
 FWD-40LX2 LCD Display
 FWD-42PV1 Plasma Display
 FWD-42PX2 Plasma Display
 FWD-50PX2 Plasma Display



BKM-FW10 Video Input/Output Adaptor

Features

- Composite Video In/Out (BNC x2) •S Video In/Out (Mini DIN 4-pin x2) •Audio In L/R (Pin jack x2)

Pre-installed in

FWD-32LX2 LCD Display
FWD-40LX2 LCD Display
FWD-42PV1 Plasma Display
FWD-42PX2 Plasma Display
FWD-50PX2 Plasma Display



BKM-FW11 Component/RGB Input Adaptor

Features

- Component/RGB In (BNC x5) •Audio In (Stereo mini jack x1)

Applicable Models

FWD-32LX2 LCD Display
FWD-40LX2 LCD Display
FWD-42PV1 Plasma Display
FWD-42PX2 Plasma Display
FWD-50PX2 Plasma Display



BKM-FW12 RGB/Component Active Through Adaptor

Features

- RGB/Component In (D-sub15pin x1) •RGB/Component Out (D-sub 15pin x1) •Audio In (Stereo mini jack x1)

Applicable Models

FWD-32LX2 LCD Display
FWD-40LX2 LCD Display
FWD-42PV1 Plasma Display
FWD-42PX2 Plasma Display
FWD-50PX2 Plasma Display



BKM-FW32 Network Management Adaptor

Features

- Enables remote control of the FWD-series Displays via IP. On/Off, Input Selection, Status monitoring, Diagnostics, error report over E-mail, On/Off timer settings and other functions are available.

Applicable Models

FWD-32LX2 LCD Display
FWD-40LX2 LCD Display
FWD-42PV1 Plasma Display
FWD-42PX2 Plasma Display
FWD-50PX2 Plasma Display



SU-32/42FW Tabletop Stand (Silver)

Applicable Models

- FWD-32LX2 LCD Display (SU-32FW only)
- FWD-40LX2 LCD Display (SU-42FW only)
- FWD-42PV1 Plasma Display (SU-42FW only)
- FWD-42PX2 Plasma Display (SU-42FW only)



SU-50FW Tabletop Stand

Applicable Models

- FWD-50PX2 Plasma Display



SS-SP32FW/40FW/42FW Speaker System (Silver or Black)

Applicable Models

- FWD-32LX2 LCD Display (SS-SP32FW only)
- FWD-40LX2 LCD Display (SS-SP40FW only)
- FWD-42PV1 Plasma Display (SS-SP42FW only)
- FWD-42PX2 Plasma Display (SS-SP42FW only)

Specifications

- 2 way passive radiator type
- Woofer x1
- Tweeter x1
- Passive radiator x1

- Magnetically shielded
- Rated impedance 6 Ω
- Capacity 7W max.
- Dimensions (WxDxH)
 - 203 x 608 x 94 mm (SS-SP42FW)
 - 158 x 480 x 78 mm (SS-SP32FW) (W/H/D)
- Mass
 - Approx. 1.4 kg (per speaker) (SS-SP42FW)
 - Approx. 1.0 kg (per speaker) (SS-SP32FW)



SS-SP50FW Speaker System (Silver or Black)

Applicable Models

- FWD-50PX2 Plasma Display

Specifications

- Left/Right channel speakers
- Dimensions (WxDxH) 12.5 cm x 8 cm x 74.1 cm
- Weight 1.5 kg
- Media Type 2 speakers
- Speaker Type Passive

- Nominal (RMS) Output Power 7 Watt
- Input Impedance 6 Ω
- Connectivity Technology Wired
- Speaker System Details 2 x right/left
- Channel Speaker 7 Watt
- 6 Ω
- Colour Silver



FS-LP1NL Floor Stand

Features

This elegant floor stand gives you great flexibility in your office environment. This moveable stand is the ideal companion for your board room. It can be moved around easily as it is equipped with wheels. Additionally, this floor stand has a plate for the installation of a video-conferencing system.

Applicable Models

FWD-32LX2 LCD Display
FWD-40LX2 LCD Display
FWD-42PV1 Plasma Display
FWD-42PX2 Plasma Display
FWD-50PX2 Plasma Display



WB-LP1NL Wall Bracket system

Features

Attach your public display onto a wall. With this wall mounting system you can do a wall installation. Once installed, you can lock a mounting hole as anti-theft protection.

Applicable Models

FWD-32LX2 LCD Display
FWD-40LX2 LCD Display
FWD-42PV1 Plasma Display
FWD-42PX2 Plasma Display
FWD-50PX2 Plasma Display



CB-LP1NL Ceiling Bracket system

Features

Mount your public display easily onto the ceiling with this accessory. With this ceiling mounting system you can easily do an overhead installation of a public display. Once installed the display can be protected via an anti-theft mechanism. (The display is tiltable)

Applicable Models

FWD-32LX2 LCD Display
FWD-40LX2 LCD Display
FWD-42PV1 Plasma Display
FWD-42PX2 Plasma Display
FWD-50PX2 Plasma Display



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BVM-A32E1WM Colour Video Monitor

Features

•32-inch* Broadcast colour video monitor •Flat surface HR Trinitron CRT provides high resolution of 1000 TV lines •EBU standard phosphors •Beam current feedback circuit for stable colour reproduction •Separate monitor control unit • Multi-format signal support •Dual link HD-SDI •Modular slot design for optional input board (BKM-61D/62HS/68X) •Auto white balance •Auto matrix selection •Auto Chroma phase •Beam landing correction •Digital Uniformity •Digital convergence •Aspect ratio 4:3 and 16:9 switchable •Memory stick for storage and recall of monitor set-up data •Built-in test signal generator •H/V delay function •External sync •Auto and manual degaussing •Various area markers •Parallel and Ethernet based remote control •SNMP remote maintenance

* 29 5/8 inches viewable area, measured diagonally.



Supplied Accessories

4:3 Mask
AC cable
AC plug holder
Tally label
Operation manual

Optional Accessories

BKM-15R Central control unit
Memory stick
BKM-14L Auto Set-up Probe
BKM-61D SD-SDI Multi analogue board
BKM-62HS HD/SD-SDI board
BKM-68X RGB/Component board
SMF-700 Monitor interface cable

Specifications

General

Signal format
15.625 kHz to 45 kHz
Type
Display unit
Power requirements
100 V to 240 V AC \pm 10%, 50/60Hz
Power consumption
approx. 235 W (with Option board: Max.)
Dimensions (W x H x D)
794.0 X 555.4 X 694.0 (mm)
31 3/8 x 21 7/8 x 26 (inch)
Mass approx.
96 kg / (211 lb 10 oz)
CRT
CRT type
32-inch HR Trinitron
(flat surface, 16:9 aspect)
AG pitch
0.32–0.36mm, 90 ° deflection,
Ø29.1 mm in-line gun
Visual screen (Viewable area, measured diagonally) W x H (Diagonal)
4:3 491.3 x 368.5 mm, (614.1 mm)
4:3 19 3/8 x 14 5/8 inch, (24 1/4 inch)
16:9 655.2 x 368.5 mm, (751.7 mm)
16:9 25 7/8 x 14 5/8 inch, (29 5/8 inch)
Phosphor
SMPT-E-C/EBU

Inputs/outputs

Control

LAN
Ethernet (10 BASE-T/100 BASE-TX),
RJ-45 x1
Parallel remote
D-sub 9-pin x 1 (Short to ground)
Option
RS-232C serial interface,
Mini DIN 8-pin x 1

Video Signal Performance

Differential gain (DG)
Within 5% for luminance from
0 to 70 cd/m²
Differential phase (DP)
Within 5° for luminance from 0 to 70 cd/m²
Frequency response
48 Hz to 30 MHz +1dB/-3 dB
DC restoration
Back porch type, back porch level:
within 1% of peak luminance,
10 to 90% APL

Synchronisation

Retrace time
Horizontal
under 3.77 μ sec
Vertical
under 650 μ sec

Raster and Picture Performance

Normal scan
5% over scan of the effective picture area
Under scan
3% under scan of the effective picture area
Linearity
Less than 1% within circle centered on the screen with a diameter equal to the vertical height, 2% at any other point*
Colour temperature
D65 / D93 / D56 / USER1-5
(User adjustable)
Convergence
Less than 0.5mm within circle centered on the screen with a diameter equal to the vertical height, 0.8 mm at any other point
Preset brightness
70 cd/m² (when a 1.0 Vp-p
100% white signal is input)
Stability of raster size

1% of picture height (at 70 cd/áu peak
luminescence, 10 to 90 % APL)

Scan delay

Horizontal
Approx. 2/9 line
Vertical
Approx. 1/2 field

Resolution (Centre)

16:9: 1000 TV lines, 4:3 1000 TV lines

Operating Conditions

Operating temperature
0 to 35 °C, Optimum operating range
20 to 30 °C
Storage temperature
-10 to 40 °C
Humidity
30 to 90 % (no condensation)

BVM-A20F1M Colour Video Monitor

Features

- 20-inch* Broadcast colour video monitor •Flat surface HR Trinitron CRT provides high resolution of 900 TV lines
- EBU standard phosphors •Beam current feedback circuit for stable colour reproduction •Separate monitor control unit •Multi-format signal support •Dual link HD-SDI
- Modular slot design for optional input board (BKM-61D/62HS/68X) •Auto white balance •Auto matrix selection •Auto Chroma phase •Digital Uniformity •Aspect ratio 4:3 and 16:9 switchable •Memory stick for storage and recall of monitor set-up data •Built-in test signal generator •H/V delay function •External sync •Auto and manual degaussing •Various area markers •Parallel and Ethernet based remote control •SNMP remote maintenance •19-inch EIA optional rack mount

* 19 inches viewable area, measured diagonally.



Supplied Accessories

4:3 Mask
AC cable
AC plug holder
Tally label
Operation manual

Optional Accessories

BKM-15R Central control unit
Memory stick
BKM-14L Auto Set-up Probe
BKM-35H Control unit attachment kit for BKM-15R with 20-inch monitor
BKM-61D SD-SDI, Multi analogue board
BKM-62HS HD/SD-SDI board
BKM-68X RGB/component board
SMF-700 Monitor interface cable

Specifications

General

Signal format
15.625 kHz to 45 kHz
Type
Display unit
Power requirements
100 V to 240 V AC \pm 10%, 50/60Hz
Power consumption
200 W (with Option board; Max.)
Dimensions (W x H x D)
444 X 414 X 570 (mm)
17 3/8 x 16 3/8 x 22 1/2 (inch)
Mass approx.
40 kg / (88 lb 3 oz)

CRT

CRT type
20-inch HR Trinitron
AG pitch
0.30 mm, 90° deflection,
Ø30.6 mm in-line gun
Visual screen (Viewable area,
measured diagonally) W x H (Diagonal)
4:3 386 x 291 mm, (482 mm)
4:3 15 1/4 x 11 1/2 inch, (19 inch)
16:9 386 x 218 mm, (443 mm)
16:9 15 1/4 x 8 5/8 inch, (17 1/2 inch)

Phosphor
SMPTE-C/EBU

Inputs/outputs

Control

LAN
Ethernet (10 BASE-T/100 BASE-TX),
RJ-45 x1
Parallel remote
D-sub 9-pin x 1 (Short to ground)
Option
RS-232C serial interface,
Mini DIN 8-pin x 1

Video Signal Performance

Differential gain (DG)
Within 5% for luminance from
0 to 100 cd/m²
Differential phase (DP)
Within 5° for luminance from
0 to 100 cd/m²
Frequency response
48 Hz to 30 MHz +1dB/-3 dB
DC restoration
Back porch type, back porch level:
within 1% of peak luminance,
10 to 90% APL

Synchronisation

Retrace time
Horizontal
under 3.77 μ sec
Vertical
under 650 μ sec

Raster and Picture Performance

Normal scan
5% over scan of the effective picture area
Under scan
3% under scan of the effective picture area
Linearity
Less than 0.5% within circle centered
on the screen with a diameter equal to the
vertical height, 1% at any other point*
Colour temperature
D65 / D93 / D56 / USER1-5
(User adjustable)
Convergence
Less than 0.4mm within circle centered on
the screen with a diameter equal to the
vertical height, 0.7 mm at any other point

Preset brightness

100 cd/m² (when a 1.0 Vp-p
100% white signal is input)
Stability of raster size
1% of picture height
(at 100 cd/áú peak luminescence,
10 to 90 % APL)

Scan delay

Horizontal
Approx. 2/9 line
Vertical
Approx. 1/2 field

Resolution (Centre)

16:9: 700 TV lines, 4:3 900 TV lines

Operating Conditions

Operating temperature
0 to 35 °C,
Optimum operating range 20 to 30 °CC
Storage temperature
-10 to 40 °C
Humidity
30 to 90 % (no condensation)

BVM-A14F5M Colour Video Monitor

Features

- 14-inch* Broadcast colour video monitor •Flat surface HR Trinitron CRT provides high resolution of 800 TV lines
- EBU standard phosphors •Beam current feedback circuit for stable colour reproduction •Multi-format signal support
- Dual link HD-SDI •Modular slot design for optional input board (BKM-61D/62HS/68X) •Auto white balance •Auto matrix selection •Auto Chroma phase •Digital Uniformity
- Aspect ratio 4:3 and 16:9 switchable •Memory stick for storage and recall of monitor set-up data •Built-in test signal generator •H/V delay function •External sync
- Auto and manual degaussing •Various area markers
- Parallel and Ethernet based remote control •SNMP remote maintenance •19-inch EIA optional rack mount

* 13 1/8 inches viewable area, measured diagonally.



Supplied Accessories

- 4:3 Mask
- AC cable
- AC plug holder
- Tally label
- Operation manual

Optional Accessories

- Memory stick
- BKM-14L Auto Set-up Probe
- BKM-30E14 19-inch EIA standard rack mounting kit
- BKM-61D SD-SDI, Multi analogue board
- BKM-62HS HD/SD-SDI board
- BKM-68X RGB/component board
- SMF-700 Monitor interface cable

Specifications

General

- Signal format
 - 15.625 kHz to 45 kHz
- Type
 - Stand-alone monitor
- Power requirements
 - 100 V to 240 V AC \pm 10%, 50/60Hz
- Power consumption
 - 170 W (Max.) (with Option board; Max.)
- Dimensions (W x H x D)
 - 482 X 280 X 571 (mm)
 - 19 x 11 1/8 x 22 1/2 (inch)
- Mass
 - approx. 26 kg / (57 lb 5 oz)
- CRT
 - CRT type
 - 14-inch HR Trinitron
 - AG pitch
 - 0.25 mm, 90 ° deflection,
 - Ø29.4 mm in-line gun
 - Visual screen (Viewable area, measured diagonally) W x H (Diagonal)
 - 4:3 267.5 x 200.6 mm, (331.6 mm)
 - 4:3 10 5/8 x 8 inch , (13 1/8 inch)
 - 16:9 267.5 x 150.5 mm, (306.9 mm)
 - 16:9 10 5/8 x 6 inch , (12 1/8 inch)
- Phosphor
 - SMPT-E/C/EBU

Inputs/outputs

Control

- LAN
 - Ethernet (10 BASE-T/100 BASE-TX), RJ-45 x1
- Parallel remote
 - D-sub 9-pin x 1 (Short to ground)
- Option
 - RS-232C serial interface,
 - Mini DIN 8-pin x 1

Video Signal Performance

- Differential gain (DG)
 - Within 5% for luminance from 0 to 70 cd/m2
- Differential phase (DP)
 - Within 5° for luminance from 0 to 70 cd/m2
- Frequency response
 - 48 Hz to 30 MHz \pm 1dB/-3 dB
- DC restoration
 - Back porch type, back porch level: within 1% of peak luminance,
 - 10 to 90% APL

Synchronisation

- Retrace time
 - Horizontal
 - under 3.77 μ sec
 - Vertical
 - under 650 μ sec

Raster and Picture Performance

- Normal scan
 - 5% over scan of the effective picture area
- Under scan
 - 3% under scan of the effective picture area
- Linearity
 - Less than 1% within circle centered on the screen with a diameter equal to the vertical height, 2% at any other point*
- Colour temperature
 - D65 / D93 / D56 / USER1-5 (User adjustable)
- Convergence
 - Less than 0.5mm within circle centered on the screen with a diameter equal to the vertical height, 0.8 mm at any other point

Preset brightness

- 70 cd/m2 (when a 1.0 Vp-p 100% white signal is input)
- Stability of raster size
 - 1% of picture height (at 70 cd/au peak luminescence, 10 to 90 % APL)
- Scan delay
 - Horizontal
 - Approx. 2/9 line
 - Vertical
 - Approx. 1/2 field
- Resolution (Centre)
 - 16:9: 600 TV lines, 4:3 800 TV lines

Operating Conditions

- Operating temperature
 - 0 to 35 °C,
 - Optimum operating range 20 to 30 °C
- Storage temperature
 - 10 to 40 °C
- Humidity
 - 30 to 90 % (no condensation)

LMD-232W LCD Monitor



23-inch wide aspect ratio high-brightness LCD panel for professional picture monitoring.

Features

- 23-inch* screen display
- High resolution of 1280 x 768 pixels (WXGA)
- Used in combination with the MEU-WX2, Multifomat Engine Unit
- Superb picture performance provides excellent brightness and contrast and wide viewing angle
- AR-Coated protection panel
- Slim and Lightweight

*Viewable area measured diagonally

Supplied Accessories

Display interface cable

Operating instructions

Optional Accessories

SU-558 Monitor Stand

SMF-600 Display IF Cable



Specifications

Picture Performance

Type

a-Si TFT Active Matrix LCD with a multi-layer AR-coated protection panel

Resolution

1280 x 768 dots

Pixel efficiency

99.99%

Dot pitch

0.3915 x 0.3915 mm

Picture Size (H x W) (Diagonal)

Approx. 501 x 301 mm
(19 3/4 x 11 7/8 inches)
584 mm (23 inches)

Aspect

15:09

Colours

16,770,000 colours

Viewing Angle

85°/85°/85°/85° (typical)
(up/down/left/right contrast>10:1)

Input

Display Input connector

Digital input

DVI-D

Dot clock

25.175 MHz, 68.250 MHz

Scanning Frequency

Horizontal: 31.469 kHz, 47.396 kHz

Vertical: 59.940 Hz, 59.995 Hz

General

Power Consumption

Approx. 65 W

Power requirement

DC 16.5 V

Operating Temperature

0 to 35 °C (32 to 95 °F)

Operating Humidity

30 to 80% (no condensation)

Storage & Transport Temperature

-10 to 40 °C (14 to 104 °F)

Storage & Transport Humidity

0 to 80%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

563 x 372 x 78 mm
(22 1/4 x 14 3/4 x 3 1/8 inches)

Mass

Approx. 6.4 Kg (Approx. 14 lb 2 oz)

Approx. 11.6 Kg (Approx. 25 lb 9 oz)

LMD-172W LCD Monitor



17-inch wide aspect ratio high-brightness LCD panel for professional picture monitoring.

Features

- 17-inch* screen display •High resolution of 1280 x 768 pixels (WXGA) •Used in combination with the MEU-WX2 Multiformat Engine Unit •Superb picture performance provides excellent brightness and contrast, and Wide viewing angle •AR-Coated protection panel
- Slim and lightweight •19-inch EIA standard rack mountable in 7U height using MB-522A mounting bracket
- VESA compatible mounting holes (75 x 75 mm pitch)
- Three-colour tally

*Viewable area measured diagonally

Supplied Accessories

Display interface cable
Operating instructions

Optional Accessories

SMF-600 Display IF Cable
SU-558 Monitor Stand
MB-522A Rack-Mount Bracket



Specifications

Picture Performance

Type
a-Si TFT Active Matrix LCD with a multi-layer AR-coated protection panel

Resolution
1280 x 768 dots

Pixel efficiency
99.99%

Dot pitch
0.284 x 0.284 mm

Picture Size (H x W) (Diagonal)
Approx. 364 x 218 mm
(14 3/8 x 8 5/8 inches)
424 mm (16 3/4 inches)

Aspect
15:09

Colours
16,770,000 colours

Viewing Angle
85°/85°/85°/85° (typical)
(up/down/left/right contrast>10:1)

Input

Display Input connector
Digital input
DVI-D

Dot clock
25.175 MHz, 68.250 MHz

Scanning Frequency
Horizontal: 31.469 kHz, 47.396 kHz
Vertical: 59.941 Hz, 59.995 Hz

General

Power Consumption
Approx. 53 W

Power requirement
DC 16.5 V/12V

Operating Temperature
0 to 35 °C (32 to 95 °F)

Operating Humidity
30 to 80% (no condensation)

Storage & Transport Temperature
-10 to 40 °C (14 to 104 °F)

Storage & Transport Humidity
0 to 80%

Operating/Storage/Trans. Pressure
700 to 1060 hPa

Dimensions (W x H x D)
441 x 294 x 76 mm
(17 3/8 x 11 5/8 x 3 inches)

Mass
Approx. 4.8 Kg (Approx. 10 lb 9 oz)
Approx. 10.0 Kg (Approx. 21 lb 1 oz)

LMD-212 LCD Monitor



21-inch 4:3 aspect ratio high-brightness LCD panel for professional picture monitoring

Features

- 21-inch* screen display •High resolution of 1024 x 768 pixels (XGA) •Used in combination with the MEU-WX2 Multiformat Engine Unit •Superb picture performance provides excellent brightness and contrast, and wide viewing angle •AR-Coated protection panel
- Slim and lightweight •19-inch EIA standard rack mountable in 10U height using MB-523 mounting bracket
- VESA compatible mounting holes (75 x 75 mm pitch)
- Three-colour tally *Viewable area measured diagonally

Supplied Accessories

Display interface cable
Operating instructions

Optional Accessories

SU-558 Monitor Stand
SMF-600 Display IF Cable
MB-523 Rack-Mount Bracket



Specifications

Picture Performance

Type

a-Si TFT Active Matrix LCD with a multi-layer AR-coated protection panel

Resolution

1024 x 768 dots

Pixel efficiency

99.99%

Dot pitch

0.420 x 0.420 mm

Picture Size (H x W) (Diagonal)

Approx. 430 x 323 mm
(17 x 12 3/4 inches)
538 mm (21 1/4 inches)

Aspect

4:3

Colours

16,770,000 colours

Viewing Angle

85°/85°/85°/85° (typical)
(up/down/left/right contrast>10:1)

Input

Display Input connector

Digital input

DVI-D

Dot clock

25.175 MHz, 65.000 MHz

Scanning Frequency

Horizontal: 31.469 kHz, 48.363 kHz

Vertical: 59.940 Hz, 60.004 Hz

General

Power Consumption

Approx. 84 W

Power requirement

DC 16.5 V

Operating Temperature

0 to 35 °C (32 to 95 °F)

Operating Humidity

30 to 80% (no condensation)

Storage & Transport Temperature

-10 to 40 °C (14 to 104 °F)

Storage & Transport Humidity

0 to 80%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

515 x 409 x 81 mm
(20 3/8 x 16 1/8 x 3 1/4 inches)

Mass

Approx. 6.7 Kg (Approx. 15 lb 7 oz)

Approx. 11.9 Kg (Approx. 26 lb 4 oz)

LMD-152 LCD Monitor



15-inch 4:3 aspect ratio high-brightness LCD panel for professional picture monitoring

Features

- High resolution of 1024 x 768 pixels (XGA) •Used in combination with the MEU-WX2 Multifomat Engine Unit
- Superb picture performance provides excellent brightness and contrast, and wide viewing angle
- AR-Coated protection panel •Slim and lightweight
- 19-inch EIA standard rack mountable in 7U height using MB-524 mounting bracket •VESA compatible mounting holes (75 x 75 mm pitch) •Three-colour tally

Supplied Accessories

Display interface cable

Operating instructions

Optional Accessories

MB-524 Rack-Mount Bracket

SMF-600 Display IF Cable

SU-558 Monitor Stand



Specifications

Picture Performance

Type

a-Si TFT Active Matrix LCD with a multi-layer AR-coated protection panel

Resolution

1024 x 768 dots

Pixel efficiency

99.99%

Dot pitch

0.297 x 0.297 mm

Picture Size (H x W) (Diagonal)

Approx. 304 x 228 mm
(12 x 9 inches)
380 mm (15 inches)

Aspect

4:3

Colours

16,770,000 colours

Viewing Angle

85°/85°/85°/85° (typical)
(up/down/left/right contrast>10:1)

Input

Display Input connector

Digital input

DVI-D

Dot clock

25.175 MHz, 65.000 MHz

Scanning Frequency

Horizontal: 31.469 kHz, 48.363 kHz

Vertical: 59.941 Hz, 60.004 Hz

General

Power Consumption

Approx. 29 W

Power requirement

DC 16.5 V/12 V

Operating Temperature

0 to 35 °C (32 to 95 °F)

Operating Humidity

30 to 80% (no condensation)

Storage & Transport Temperature

-10 to 40 °C (14 to 104 °F)

Storage & Transport Humidity

0 to 80%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

379 x 297x 70 mm
(15 x 11 5/8 x 2 7/8 inches)

Mass

Approx. 4.0 Kg (Approx. 8 lb 13oz)

Approx. 9.2 Kg (Approx. 20 lb 4oz)

MEU-WX2 Multiformat Engine Unit



Multiformat Engine Unit for use with an LCD panel
(LMD-232W, LMD-212, LMD-172W, and LMD-152)

Features

- Signal processing unit for the LMD-232W, LMD-212, LMD-172W, and LMD-152
- Accepts RGB, analogue component, Composite, S-Video signals as standard. Accepts SD-SDI signals, HD-SDI and DV signals by use of the appropriate optional input adaptor
- Sophisticated I/P Conversion using X-Algorithm technology
- Accurate Gamma and stable White Balance using ChromaTru technology
- Various Marker settings
- Colour temperature selection
- Selectable scan size and aspect ratio
- Parallel remote control
- Stereo audio monitoring
- Protected controls
- H/V delay function
- Setup level for analogue component and NTSC signal
- Blue-only mode
- Monochrome mode
- Auto Chroma/ Phase setup
- External sync capability
- Smart APA (Auto Pixel Alignment)
- Lightweight in 1U size



Supplied Accessories

- Display interface cable (1)
- Screw (4)
- CD-ROM manual (1)
- AC plug holder (1)
- AC cord (1)
- Operating manuals (1)
- Mounting bracket (for MEU) (1)

Optional Accessories

- BKM-255DV DV Input Adaptor
- SMF-600 Display IF Cable
- BKM-243HS HD SDI&SDI Input Adaptor
- BKM-220D SDI 4:2:2 Input Adaptor

Specifications

Input

Composite

- BNC, Loop through, automatic
- 75 Ω termination (x1)
- 1.0 Vp-p \pm 3 dB, sync negative

Y/C

- BNC, Loop through, automatic
- 75 Ω termination (x2)
- S-Y: 1.0 Vp-p \pm 3 dB, sync negative
- S-C: 0.286 Vp-p \pm 3 dB (NTSC)
- 0.3 Vp-p \pm 3 dB (PAL)

Component

- BNC, Loop through, automatic
- 75 Ω termination (x3)
- 0.7 Vp-p \pm 3 dB

RGB

- BNC, Loop through, automatic
- 75 Ω termination (x3)
- G: 0.7 Vp-p \pm 3 dB, Sync on G 0.3Vp-p
- B: 0.7 Vp-p \pm 3 dB
- R: 0.7 Vp-p \pm 3 dB

Audio in (for Video signals)

- Stereo mini jack (x1), -5 dBu, more than 47 k Ω

OPTION A-1

- Option Slot (x1)

OPTION A-2

- Option Slot (x1)

OPTION B-1

- Option Slot (x1)

OPTION B-2

- Option Slot (x1)

Ext. sync

- BNC, Loop-through, automatic
- 75 Ω termination
- 0.3 ~ 4 Vp-p \pm 3 dB, sync negative, usable
- tri-level sync signal 0.6 Vp-p \pm 3 dB

Computer

- HD D-sub 15-pin (female) (x1), 0.7 Vp-p, 75 Ω , positive (R,G,B)

Audio in (for computer signals)

- Stereo mini jack (x1), -5 dBu, more than 47 k Ω

DC IN

- XLR 4-pin (male) (x1), 12 V, output impedance 0.05 Ω or less

Output

Audio monitor out

- Stereo mini jack (x1)

Speaker Out

- Stereo (0.5 W + 0.5 W)

PARALLEL Remote

- Modular 8-pin (Assignable)

Display Signal Out

- Exclusive connector (x1)

Display DC Out

- XLR 4-pin (female) (x1), DC 16.5 V (when AC power is supplied) DC 12 V (when DC power is supplied)

Video

Horizontal Scanning Frequency

- 15 to 45 kHz

Frame Scanning Frequency

- 48 to 60 Hz

Computer

Dot clock

- 110 MHz

Horizontal Scanning Frequency

- 28 to 69 kHz

Vertical Scanning Frequency (frame)

- 60 to 85 Hz

Plug & Play

- DDC-2B

General

Power consumption

- Maximum: Approx. 92 W (with 2 x BKM-243HS and LMD-232W)
- Standard: Approx. 26 W (without optional input adaptor)

Power requirement

- AC 100 to 240 V \pm 10%, 50/60 Hz, DC 12 V (LMD-172W only)

Operating Temperature

- 0 to 35 $^{\circ}$ C (32 to 95 $^{\circ}$ F)

Operating Humidity

- 30 to 85% (no condensation)

Storage and Trans. Temperature

- 10 to 40 $^{\circ}$ C (14 to 104 $^{\circ}$ F)

Storage & Transport Humidity

- 0 to 90%

Operating/Storage/Trans. Pressure

- 700 to 1060 hPa

Dimensions (W x H x D)

- (excluding protrusions)
- 434 x 44 x 305 mm
- (17 1/8 x 1 3/4 x 12 1/8 inches)

Mass

- Approx. 4.5 kg (9 lb 15 oz)

LMD-2020 LCD Monitor

20-inch 4:3 aspect high-brightness LCD monitor
for professional picture monitoring.

Features

- Precise reproduction of interlace SD images
- Excellent Brightness and Contrast •Faithful colour reproduction
- Lightweight and thin •Full range of analogue SD input capability •Digital SD-SDI input capability with the use of the optional BKM-320D
- 19-inch EIA rack mountable (using MB-527 mounting bracket)
- VESA 100 x 100 pitch spacings •Supplied monitor stand
- Operational features inherited from Sony PVM monitors
- AR-Coated protection panel
- Normal scan and Under scan mode •Assignable parallel remote control

Supplied Accessories

AC power cord x 1
AC plug holder x 2
CD-ROM x 1
Using the CD-ROM Manual x 1

Optional Accessories

MB-527 Mounting Bracket
BKM-320D SDI 4:2:2 input adaptor

Specifications

Picture Performance

LCD Panel

Type

A-Si TFT Active Matrix LCD with an
AR-coated protection panel

Resolution

640 x 480 dots

Pixel efficiency

99.99%

Dot pitch

0.213(H) x 0.638(V) mm

Picture Size

(H x W) Approx. 408 x 306mm

(Diagonal) 510mm (20.1 inch)

Aspect

4:3

Colours

Approx. 16,700,000 colours

Viewing Angle

85°/85°/85°/85° (U/D/L/R, contrast
>10:1 typical)

Input

Line A

Composite

BNC type x1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Y/C

DIN 4 pin x 1

Y: 1.0Vp-p±3dB 75Ω terminated,

C: 0.286Vp-p±3dB(NTSC),

0.3Vp-p±3dB (PAL) 75Ω terminated,

sync 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kΩ or higher

Line B

Composite BNC type x 1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kΩ or higher

RGB/Component

RGB/Component BNC type x 3

0.7Vp-p±3dB 75Ω terminated

Sync on Green 0.3Vp-p, negative

Audio in

RCA pin x 1

-5dBu 47kilohms or higher

Option

D1-SDI

D-sub 9-pin x 1

Audio in

RCA pin x 1 -5dBu 47kΩ or higher

External Sync

BNC type x 1

Remote

Parallel remote

Modular 8-pin (Assignable)

TALLY

Controlled through parallel remote
(Moduler 8-pin)

Output

Line A

Composite BNC type x 1

Loop-through, with 75Ω automatic terminal
function

Y/C

DIN 4 pin x 1

Loop-through, with 75Ω automatic
terminal function

Audio in

RCA pin x 1

Loop-through

Line B

Composite

BNC type x 1

Loop-through, with 75Ω automatic
terminal function

Audio in

RCA pin x 1

Loop-through

RGB/Component

RGB/Component

BNC type x 3

Loop-through, with 75Ω automatic
terminal function

Audio in

RCA pin x 1

Loop-through

External Sync

BNC type x 1 Loop-through

with 75 Ω automatic terminal function

Speaker power

0.5W monaural

General

Power Consumption

Approx. 87W

Power requirement

AC100 240V 50/60Hz

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85% (No condensation)

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

Dimension with stand (mm)

Approx. 470 x 441 x 264 mm

Dimension without stand

Approx. 470 x 394 x 87mm

Mass

Panel & Stand

Approx. 9.2 kg

Panel only

Approx. 7.5 kg



LMD-2010 LCD Monitor

20-inch 4:3 aspect high-brightness LCD monitor
for professional picture monitoring.

Features

- Precise reproduction of interlace SD images •Excellent Brightness and Contrast •Faithful colour reproduction
- Lightweight and thin •Full range of analogue SD input capability •19-inch EIA rack mountable (using MB-527 mounting bracket) •VESA 100 x 100 pitch spacings
- Supplied monitor stand •Operational features inherited from Sony PVM monitors. •Normal scan and Under scan mode •Assignable parallel remote control

Supplied Accessories

- AC power cord x 1
- AC plug holder x 2
- CD-ROM x 1
- Using the CD-ROM Manual x 1

Optional Accessories

- MB-527 Mounting Bracket



Specifications

Picture Performance

LCD Panel

Type

A-Si TFT Active Matrix LCD

Resolution

640 x 480 dots

Pixel efficiency

99.99%

Dot pitch

0.213(H) x 0.638(V) mm

Picture Size

(H x W) Approx. 408 x 306mm

(Diagonal) 510mm (20.1 inch)

Aspect

4:3

Colours

Approx. 16,700,000 colours

Viewing Angle

85°/85°/85°/85° (U/D/L/R, contrast
>10:1 typical)

Input

Line A

Composite

BNC type x1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Y/C

DIN 4 pin x 1

Y: 1.0Vp-p±3dB 75Ω terminated,

C: 0.286Vp-p±3dB(NTSC),

0.3Vp-p±3dB (PAL) 75Ω terminated,

sync 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kΩ or higher

Line B

Composite BNC type x 1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kΩ or higher

RGB/Component

RGB/Component BNC type x 3

0.7Vp-p±3dB 75Ω terminated

Sync on Green 0.3Vp-p, negative

Audio in

RCA pin x 1

-5dBu 47kΩ or higher

Remote

Parallel remote

Modular 8-pin (Assignable)

Output

Line A

Composite BNC type x 1

Loop-through, with 75Ω automatic terminal function

Y/C

DIN 4 pin x 1

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

Line B

Composite

BNC type x 1

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

RGB/Component

RGB/Component

BNC type x 3

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

Speaker power

0.5W monaural

General

Power Consumption

Approx. 84W

Power requirement

AC100 240V 50/60Hz

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85% (No condensation)

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

Dimension with stand (mm)

Approx. 470 x 441 x 264 mm

Dimension without stand

Approx. 470 x 394 x 87mm

Mass

Panel & Stand

Approx. 8.7 Kg

Panel only

Approx. 7.0 kg

LMD-1420 LCD Monitor

14-inch 4:3 aspect high-brightness LCD monitor for professional picture monitoring.

Features

- Precise reproduction of interlace SD images
- Excellent brightness and contrast
- Faithful colour reproduction
- Lightweight and thin
- Full range of analogue SD input capability
- Digital SD-SDI input capability with the use of the optional BKM-320D
- 19-inch EIA rack mountable (using MB-526 mounting bracket)
- VESA 100 x 100 pitch spacings
- Supplied monitor stand
- Operational features inherited from Sony PVM monitors.
- AR-Coated protection panel
- Normal scan and Under scan mode
- Assignable parallel remote control

Supplied Accessories

AC power cord x 1
AC plug holder x 2
CD-ROM x 1
Using the CD-ROM Manual x 1

Optional Accessories

MB-526 Mounting Bracket
BKM-320D SDI 4:2:2 input Adaptor

Specifications

Picture Performance

LCD Panel

Type

A-Si TFT Active Matrix LCD with an AR-coated protection panel

Resolution

640 x 480 dots

Pixel efficiency

99.99%

Dot pitch

0.443(H) x 0.443(V) mm

Picture Size

(H x W) Approx. 283 x 212mm

(Diagonal) 354mm (14 inch)

Aspect

4:3

Colours

Approx. 16,200,000 colours

Viewing Angle

85°/85°/85°/85° (U/D/L/R, contrast >10:1 typical)

Input

Line A

Composite

BNC type x1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Y/C

DIN 4 pin x 1

Y: 1.0Vp-p±3dB 75Ω terminated,

C: 0.286Vp-p±3dB(NTSC),

0.3Vp-p±3dB (PAL) 75Ω terminated, sync 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kΩ or higher

Line B

Composite BNC type x 1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kΩ or higher

RGB/Component

RGB/Component BNC type x 3

0.7Vp-p±3dB 75Ω terminated

Sync on Green 0.3Vp-p, negative

Audio in

RCA pin x 1

-5dBu 47kΩ or higher

Option

D1-SDI

D-sub 9-pin x 1

Audio in

RCA pin x 1 -5dBu 47kΩ or higher

External Sync

BNC type x 1

Remote

Parallel remote

Modular 8-pin (Assignable)

TALLY

Controlled through parallel remote

(Modular 8-pin)

Output

Line A

Composite BNC type x 1

Loop-through, with 75Ω automatic terminal function

Y/C

DIN 4 pin x 1

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

Line B

Composite

BNC type x 1

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

RGB/Component

RGB/Component

BNC type x 3

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

External Sync

BNC type x 1 Loop-through

with 75 Ω automatic terminal function

Speaker power

0.5W monaural

General

Power Consumption

Approx. 51W

Power requirement

AC100 240V 50/60Hz

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85% (No condensation)

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

Dimension with stand (mm)

Approx. 343 x 354 x 264 mm

Dimension without stand

Approx. 343 x 304 x 87 mm

Mass

Panel & Stand

Approx. 6.8 kg

Panel only

Approx. 5.1 kg



LMD-1410 LCD Monitor

14-inch 4:3 aspect high-brightness LCD monitor for professional picture monitoring.

Features

- Precise reproduction of interlace SD images •Excellent Brightness and Contrast •Faithful colour reproduction
- Lightweight and thin •Full range of analogue SD input capability •19-inch EIA rack mountable (using MB-526 mounting bracket) •VESA 100 x 100 pitch spacings
- Supplied monitor stand •Operational features inherited from Sony PVM monitors. •Normal scan and Under scan mode •Assignable parallel remote control

Supplied Accessories

- AC power cord x 1
- AC plug holder x 2
- CD-ROM x 1
- Using the CD-ROM Manual x 1

Optional Accessories

- MB-526 Mounting Bracket

Specifications

Picture Performance

LCD Panel

Type

A-Si TFT Active Matrix LCD

Resolution

640 x 480 dots

Pixel efficiency

99.99%

Dot pitch

0.443(H) x 0.443(V) mm

Picture Size (H x V)

Approx. 283 x 212mm

(Diagonal) 354mm (14 inch)

Aspect

4:3

Colours

Approx. 16,200,000 colours

Viewing Angle

85°/85°/85°/85° (U/D/L/R, contrast

>10:1 typical)

Input

Line A

Composite

BNC type x1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Y/C

DIN 4 pin x 1

Y: 1.0Vp-p±3dB 75Ω terminated,

C: 0.286Vp-p±3dB(NTSC),

0.3Vp-p±3dB (PAL) 75Ω terminated,

sync 0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kΩ or higher

Line B

Composite BNC type x 1

1.0Vp-p±3dB 75Ω terminated sync

0.3 Vp-p negative

Audio in RCA pin x 1

-5dBu 47kΩ or higher

RGB/Component

RGB/Component BNC type x 3

0.7Vp-p±3dB 75Ω terminated

Sync on Green 0.3Vp-p, negative

Audio in

RCA pin x 1

-5dBu 47kΩ or higher

Remote

Parallel remote

Modular 8-pin (Assignable)

Output

Line A

Composite BNC type x 1

Loop-through, with 75Ω automatic terminal function

Y/C

DIN 4 pin x 1

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

Line B

Composite

BNC type x 1

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

RGB/Component

RGB/Component

BNC type x 3

Loop-through, with 75Ω automatic terminal function

Audio in

RCA pin x 1

Loop-through

Speaker power

0.5W monaural

General

Power Consumption

Approx. 48W

Power requirement

AC100 240V 50/60Hz

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85% (No condensation)

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Dimensions (W x H x D)

Dimension with stand (mm)

Approx. 343 x 354 x 264 mm

Dimension without stand

Approx. 343 x 304 x 87 mm

Mass

Panel & Stand

Approx. 6.5 kg

Panel only

Approx. 4.8 kg



LMD-9050 8.4-inch Multiformat LCD Monitor

Features

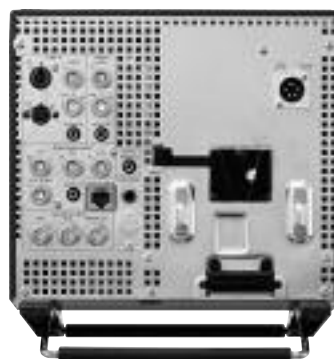
Excellent Picture Quality •Excellent Brightness and Contrast •Wide Viewing Angle •170 degrees, horizontally and vertically •AR-Coated Protection Panel •Versatile Input Signals: Composite PAL/NTSC, Y/C, Component and RGB, D1-SDI and HD SDI •Professional Functionalities •AC/DC operation •Battery operation •Parallel Remote (Modular 8-pin) •Colour Temperature Adjustment •Five gamma presets •Underscan mode •Blue Only Mode •External sync •Aspect ratio switchable •Three-colour tally lamp. •19-inch EIA dual rack mountable (using the MB-525/528 mounting bracket)

Supplied Accessories

AC power cord x 1
AC plug holder x 1
AC adaptor x 1
Approx. 101 x 171 x 88mm (including projections)
Approx. 700g
Operation Instructions x 1
CD-ROM x 1
Using the CD-ROM Manual x 1

Optional Accessories

MB-525 Mounting Bracket
MB-528 Blank Panel Attachment for MB-525
VF-509 ENG Kit (Viewing Hood, Carrying Handle and Connector Protector)
BP-GL95/BP-GL65 Rechargeable Lithium-ion Battery Pack
BP-L60S Lithium-ion Battery Pack
BC-L70 Lithium-ion Battery Charger



Specifications

Picture Performance

Type

a-Si TFT Active Matrix LCD with AR-coated protection panel

Resolution

1024 x 768 dots

Pixel efficiency

99.99%

Picture Size (WxH)

Approx. 170.496 x 127.872mm
8.4 inch (213mm)

Aspect

4:3

Colours

16,770,000 colours

Viewing Angle

85°/85°/85°/85° (typical) (up/down/left/right contrast.10:1)

Input/Output

INPUT

LINE A

Composite BNC x 1

Y/C 4-pin mini-DIN x 1

Audio Minijack 1

LINE B

Composite BNC x 1

Audio Minijack 1

RGB/Component

BNC x 3

Audio Minijack 1

HD-SDI/D1-SDI

BNC x 2 (HD and D1 are automatically detected)

Ext.sync

BNC x 1

Remote Parallel remote Modular 8-pin x 1

OUTPUT

LINE A

Y/C 4-pin mini-DINx1

Composite BNC x 1 automatic

75Ω termination

LINE B

Composite BNC x 1 automatic

75Ω termination

HD-SDI/D1-SDI Monitor output

BNC x 1

Audio output

Minijack 1

Headphones output

Mini jack x 1(Monaural)

Speaker output

0.5W(Monaural)

General

Power consumption

Approx. 25W with AC Adaptor

Power requirement

DC 12V (XLR Connector x1), AC100 to 240V. 50/60Hz (AC power adaptor x1), Battery

Operating Temperature

0 to 35 °C

Operating Humidity

30 to 85%(No condensation)

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Storage & Transport Temperature

-10 to 40 °C

Storage & Transport Humidity

0 to 90%

Dimensions (WxHxD)

Approx. 216 x 206 (230 including stand)
x 136.1 (159.5 including stand,
210 including AC adaptor) mm

Mass

Approx.3 Kg without supplied Accessories
(3.11 Kg including stand, 3.9 Kg including AC adaptor)

LMD-9030 8.4-inch LCD Video monitor

Features

- One-piece monitor for Standard Definition •4:3/16:9 Switchable Display •SD-SDI capability as standard
- Analogue composite, Y/C and analogue component interfaces •Can also accept High Definition signals in component analogue format •High picture quality provided by high brightness, high contrast and wide viewing angles •AC/DC power •Battery operation
- Professional Functionalities •Underscan mode
- Blue only mode •19-inch EIA standard rack mountable
- Slim and light •AR-coated panel

Supplied Accessories

- AC adaptor (1)
- AC Cord (1)
- AC plug holder (1)
- Operating instructions (1)
- CD-ROM (1)
- Using the CD-ROM Manual (1)

Optional Accessories

- MB-525 Mounting Bracket
- MB-528 Blank Panel Attachment for MB-525
- VF-509 ENG Kit (Viewing Hood, Carrying Handle and Connector Protector)
- BP-GL95/BP-GL65 Rechargeable Lithium-ion Battery Pack
- BP-L60S Lithium-ion Battery Pack
- BC-L70 Lithium-ion Battery Charger



Specifications

Picture Performance

Type

a-Si TFT Active Matrix LCD with a multi-layer AR-coated protection panel

Resolution

640 x 680 dots

Pixel efficiency

99.99%

Picture Size (H x W), (Viewable area)

Approx. 170.9 x 128.2 mm,
(Approx. 6 3/4 x 5 1/8 inches)
(Diagonal) 213.6 mm (8.4-inch)

Aspect

4:3

Colours

16,770,000 colours

Viewing Angle

85°/85°/85°/85° (typical)
(up/down/left/right contrast>10:1)

Input

Line A

Composite

BNC x 1, 1.0 Vp-p +3dB,
-6 dB sync negative
4-pin mini-DIN x 1

Y/C

Y : 1.0 Vp-p + 3dB,
-6 dB sync negative
C : 0.286 Vp-p ±3 dB (NTSC),
0.3 Vp-p ±3 dB (PAL)

Audio

Mini jack x 1, -5 dBu 47 kΩ or higher

Line B

Composite

BNC x 1, 1.0 Vp-p +3 dB,
-6 dB sync negative

Audio

Mini jack x 1, -5 dBu 47 kΩ or higher

RGB/Component

RGB/Component

BNC x 3, RGB input :
0.7 Vp-p +3 dB, -6 dB
(Sync On Green,
0.3 Vp-p sync negative)
Component input : 0.7 Vp-p +3 dB,
-6 dB (75% chrominance standard
colour bar signal)

Audio

Mini jack x 1, -5 dBu 47 kΩ or higher

Ext.sync

BNC x 1, 0.3 to 4 Vp-p ± bipolarity ternary
or negative polarity binary

D1-SDI

BNC x 2, Sampling frequency :Y/R-Y/B-Y
13.5 MHz, Quantization 10 bits/sample

Remote

Parallel remote

Modular connector
8-pin x 1(Assignable)

Output

Line A

Composite

BNC x 1, Loop-through,
with 75 Ω automatic termination

Y/C

4-pin mini-DIN x 1, Loop-through,
with 75 Ω automatic termination

Line B

Composite

BNC x 1, Loop-through,
with 75 Ω automatic termination

D1-SDI Monitor output

BNC x 1, Output signal amplitude:
800 mVp-p ±10%, Output impedance:
75 Ω unbalanced

Audio output

Mini jack x 1, Loop-through

Headphones output

Mini jack x 1 (Monaural), Loop-through

Speaker output

0.5 W (Monaural)

General

Power Consumption

Approx. 16W, With AC Adaptor:
Approx. 22 W

Power requirement

AC 100 to 240 V, 50/60 Hz, 0.82 to 0.42 A,
DC 12 V 1.6 A,
Rechargeable Battery Pack

Operating Temperature

0 to 40 °C

Operating Humidity

30 to 85 % (No condensation)

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Storage & Transport Temperature

-20 to 60 °C

Storage & Transport Humidity

0 to 90 %

Dimensions (W x H x D)

Approx. 216 x 206 x 136.1 mm
(8 5/8 x 8 1/8 x 5 3/8 inches)
Dimension with the supplied stand
Approx. 216 x 230 x 159.5 mm
(8 5/8 x 9 1/8 x 6 3/8 inches)
Dimension with the supplied stand
and AC adaptor
Approx. 216 x 230 x 210 mm
(8 5/8 x 9 1/8 x 8 3/8 inches)

Mass

Approx. 2.9 Kg (6 lb 6 oz)
With the supplied stand
Approx. 3.1 Kg (6 lb 13 oz)
With the supplied stand and AC adaptor
Approx. 3.8 Kg (8 lb 6 oz)

LMD-9020 8.4-inch LCD Video monitor

Features

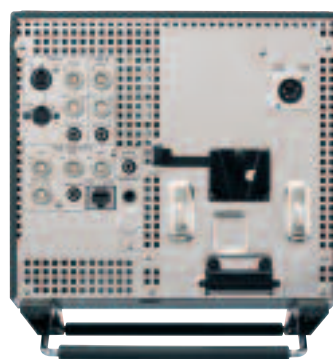
- One-piece monitor for Standard Definition
- 4:3/16:9 Switchable Display •Analogue composite, Y/C and analogue component interfaces •Can also accept High Definition signals in component analogue format •High picture quality provided by high brightness, high contrast and wide viewing angles •AC/DC power
- Battery operation •Professional Functionalities
- Underscan mode •Blue only mode •19-inch EIA standard rack mountable •slim and light •AR-coated panel

Supplied Accessories

- AC adaptor (1)
- AC Cord (1)
- AC plug holder (1)
- Operating instructions (1)
- CD-ROM (1)
- Using the CD-ROM Manual (1)

Optional Accessories

- MB-525 Mounting Bracket
- MB-528 Blank Panel Attachment for MB-525
- VF-509 ENG Kit (Viewing Hood, Carrying Handle and Connector Protector)
- BP-GL95/BP-GL65 Rechargeable Lithium-ion Battery Pack
- BP-L60S Lithium-ion Battery Pack
- BC-L70 Lithium-ion Battery Charger



Specifications

Picture Performance

Type

a-Si TFT Active Matrix LCD with a multi-layer AR-coated protection panel

Resolution

640 x 680 dots

Pixel efficiency

99.99%

Picture Size (H x W), (Viewable area)

Approx. 170.9 x 128.2 mm,
(Approx. 6 3/4 x 5 1/8 inches)
(Diagonal) 213.6 mm (8.4-inch)

Aspect

4:3

Colours 1

6,770,000 colours

Viewing Angle

85°/85°/85°/85° (typical)
(up/down/left/right contrast>10:1)

Input

Line A

Composite

BNC x 1, 1.0 Vp-p +3dB,
-6 dB sync negative 4-pin mini-DIN x 1

Y/C

Y : 1.0 Vp-p + 3dB,
-6 dB sync negative
C : 0.286 Vp-p ±3 dB (NTSC),
0.3 Vp-p ±3 dB (PAL)

Audio

Mini jack x 1, -5 dBu 47 kΩ or higher

Line B

Composite

BNC x 1, 1.0 Vp-p +3 dB,
-6 dB sync negative

Audio

Mini jack x 1, -5 dBu 47 kΩ or higher

RGB Component

RGB/Component

BNC x 3,
RGB input : 0.7 Vp-p +3 dB, -6 dB
(Sync On Green,
0.3 Vp-p sync negative)
Component input : 0.7 Vp-p +3 dB, -6 dB
(75% chrominance standard colour bar
signal)

Audio

Mini jack x 1, -5 dBu 47 kΩ or higher

Ext.sync

BNC x 1, 0.3 to 4 Vp-p ± bipolarity
ternary or negative polarity binary

Remote

Parallel remote

Modular connector
8-pin x 1 (Assignable)

Output

Line A

Composite

BNC x 1, Loop-through,
with 75 Ω automatic termination

Y/C

4-pin mini-DIN x 1, Loop-through,
with 75 Ω automatic termination

Line B

Composite

BNC x 1, Loop-through,
with 75 Ω automatic termination

Audio output

Mini jack x 1, Loop-through

Headphones output

Mini jack x 1 (Monaural), Loop-through

Speaker output

0.5 W (Monaural)

General

Power Consumption

Approx. 15 W, With AC Adaptor :
Approx. 20 W

Power requirement

AC 100 to 240 V, 50/60 Hz, 0.82 to 0.42 A,
DC 12 V 1.5 A,
Rechargeable Battery Pack

Operating Temperature

0 to 40 °C

Operating Humidity

30 to 85 % (No condensation)

Operating/Storage/Trans. Pressure

700 to 1060 hPa

Storage & Transport Temperature

-20 to 60 °C

Storage & Transport Humidity

0 to 90 %

Dimensions (W x H x D)

Approx. 216 x 206 x 136.1 mm
(8 5/8 x 8 1/8 x 5 3/8 inches)

Dimension

with the supplied stand

Approx. 216 x 230 x 159.5 mm
(8 5/8 x 9 1/8 x 6 3/8 inches)

Dimension

with the supplied stand and AC adaptor

Approx. 216 x 230 x 210 mm
(8 5/8 x 9 1/8 x 8 3/8 inches)

Mass

Approx. 2.8 Kg (6 lb 3 oz)

With the supplied stand Approx.

3.0 Kg (6 lb 10 oz)

With the supplied stand and AC adaptor

Approx. 3.7 Kg (8 lb 3 oz)

LMD-7220W Multiple LCD Monitor

Features

Dual screen 7-inch 16:9 aspect ratio high-brightness LCD monitor • 7-inch 16:9 aspect ratio LCD panels (x2)
 • Selectable Aspect Ratio (between 16:9 and 4:3)
 • High picture quality provided by high brightness, high contrast, wide viewing angle panels • 19-inch EIA standard rack mountable • SDI input (using BKM-320D optional input adaptor) • Low power consumption
 • Slim and Light • 5-step tilt

Supplied Accessories

AC power adaptor (1)
 AC power cord (1)
 AC plug holder (1)
 Screws for AC adaptor holder (2)
 Operating Instructions (1)

Optional Accessories

BKM-320D SDI 4:2:2 Input adaptor



Specifications

LCD Panel

Type
 a-Si TFT Active Matrix LCD
 Resolution
 480 x 234 dots
 Pixel efficiency
 99.99%
 Picture Size (H x W)
 Approx. 154.1 x 86.6 mm
 (6 1/8 x 3 1/2 inches)
 Diagonal
 7 inches (176.7 mm)
 Aspect
 16:09
 Colours
 Full colour
 Viewing Angle
 40°/65°/65°/65° (typical)
 (up/down/left/right contrast>10:1)

Input / Output

Composite
 Input
 BNC (x 2)
 1.0 Vp-p ±2 dB, sync negative
 Output
 BNC (x 2), Loop through Automatic
 75 Ω termination
 OPTION IN
 D-sub 9pin connector (x2)
 Remote
 Parallel
 Modular 8 pin (x2)

General

Power Consumption
 Maximum: Approx. 68 W
 (with 2 x BKM-320D)
 Standard:
 Approx. 23 W
 (without optional input adaptor)
 Power Requirement
 12V DC (with the supplied
 AC power adaptor)
 AC power adaptor:
 AC 100 to 240 V, 50/60 Hz
 Peak inrush current
 (1) Power on, current probe method: 57A
 (230V)
 (2) Hot switching inrush current, measured
 in accordance with European standard
 EN55103-1:8A (230V)
 Operating Temperature
 0 to 35°C (32 to 95° F)
 Operating Humidity
 30 to 85 % (no condensation)
 Storage & Transport Temperature
 -10 to 40°C (14 to 104° F)
 Storage & Transport Humidity
 0 to 90 %
 Operating / Storage / Trans. Pressure
 700 hPa to 1060 hPa
 Dimensions (W x H x D)(inches)
 482 x 133 x 47 (19 x 5 1/4 x 1 7/8)*1
 With AC adaptor and BKM-320D:
 482 x 133 x 116 (19 x 5 1/4 x 4 5/8)
 Mass
 Approx. 2.3Kg (5 lb 1 oz)*2

*1 Without projecting parts.

*2 Excluding supplied accessories.

LMD-5320 Multiple LCD Monitor

Features

Triple screen 5.6-inch 4:3 aspect ratio high-brightness LCD monitor •5.6-inch 4:3 aspect ratio LCD panels (x3)
 •High picture quality provided by high brightness, high contrast, wide viewing angle panels •19-inch EIA standard rack mountable •SDI input (using BKM-320D optional input adaptor) •Low power consumption
 •Slim and Light •5-step tilt

Supplied Accessories

AC power adaptor (1)
 AC power cord (1)
 AC plug holder (1)
 Screws for AC adaptor holder (2)
 Operating Instructions (1)

Optional Accessories

BKM-320D SDI 4:2:2 Input adaptor



Specifications

LCD Panel

Type
 a-Si TFT Active Matrix LCD
 Resolution
 320 x 234 dots
 Pixel efficiency
 99,99%
 Picture Size (H x W)
 Approx. 113 x 85 mm (4 1/2 x 3 3/8 inches)
 Diagonal
 5 5/8 inches (142.24 mm)
 Aspect
 4:03
 Colours
 Full colour
 Viewing Angle
 50°/30°/50°/50°(typical)
 (up/down/left/right contrast>10:1)

Input / Output

Composite
 Input
 BNC (x 3)
 1.0 Vp-p ±2 dB, sync negative
 Output
 BNC (x 3), Loop through Automatic 75 Ω termination
 OPTION IN
 D-sub 9pin connector (x3)
 Remote
 Parallel
 Modular 8 pin (x3)

General

Power Consumption
 Maximum: Approx. 28W
 (with 3 x BKM-320D)
 Standard:
 Approx. 22 W (without optional input adaptor)
 Power Requirement
 12V DC (with the supplied AC power adaptor)
 AC power adaptor: AC 100 to 240 V, 50/60 Hz
 Peak Inrush current
 (1) Power on, current probe method:55A (230V)
 (2) Hot switching inrush current, measured in accordance with European standard EN55103-1:8A (230V)
 Operating Temperature
 0 to 35°C (32 to 95° F)
 Operating Humidity
 30 to 85 % (no condensation)
 Storage & Transport Temperature
 -10 to 40°C (14 to 104° F)
 Storage & Transport Humidity
 0 to 90 %
 Operating / Storage / Trans. Pressure
 700 hPa to 1060 hPa
 Dimensions (W x H x D)(inches)
 482 x 88.1 x 47 mm (19 x 3 1/2 x 1 7/8)*¹
 With AC adaptor and BKM-320D:
 482 x 88.1 x 116 mm (19 x 3 1/2 x 4 5/8)
 Mass
 Approx. 2.3Kg (5 lb 1 oz)*²

*1 Without projecting parts.

*2 Excluding supplied accessories.

LMD-4420 Multiple LCD Monitor

Features

Quad screen 4-inch 4:3 aspect ratio high-brightness LCD monitor •4-inch 4:3 aspect ratio LCD panels (x4)
•High picture quality provided by high brightness, high contrast, wide viewing angle panels •19-inch EIA standard rack mountable •SDI input (using BKM-320D optional input adaptor) •Low power consumption
•Slim and Light •3-step tilt

Supplied Accessories

AC power adaptor (1)
AC power cord (1)
AC plug holder (1)
Screws for AC adaptor holder (2)
Operating Instructions (1)

Optional Accessories

BKM-320D SDI 4:2:2 Input adaptor



Specifications

LCD Panel

Type
a-Si TFT Active Matrix LCD
Resolution
480 x 234 dots
Pixel efficiency
99,99%
Picture Size (H x W)
Approx. 82.1 x 61.8 mm (3 1/4 x 2 1/2 inches)
Diagonal
4 1/8 inches (102.8 mm)
Aspect
4:03
Colours
Full colour
Viewing Angle
50°/30°/50°/50°(typical)
(up/down/left/right contrast>10:1)

Input / Output

Composite
Input
BNC (x 4)
1.0 Vp-p ±2 dB, sync negative
Output
BNC (x 4), Loop through Automatic
75 Ω termination
OPTION IN
D-sub 9pin connector (x4)
Remote
Parallel
Modular 8 pin (x4)

General

Power Consumption
Maximum: Approx. 26 W (with 4 x BKM-320D)
Standard: Approx. 18 W (without optional input adaptor)
Power Requirement
12V DC (with the supplied AC power adaptor)
AC power adaptor: AC 100 to 240 V, 50/60 Hz
Peak inrush current
(1) Power on, current probe method:
35A (230V)
(2) Hot switching inrush current, measured in accordance with European standard EN55103-1:8A (230V)
Operating Temperature
0 to 35°C (32 to 95° F)
Operating Humidity
30 to 85 % (no condensation)
Storage & Transport Temperature
-10 to 40°C (14 to 104° F)
Storage & Transport Humidity
0 to 90 %
Operating / Storage / Trans. Pressure
700 hPa to 1060 hPa
Dimensions (W x H x D)(inches)
482 x 88.1 x 47 (19 x 3 1/2 x 1 7/8)*¹
With AC adaptor and BKM-320D:
482 x 88.1 x 116 (19 x 3 1/2 x 4 5/8)
Mass
Approx. 1.9 Kg (4 lb 3 oz)*²

*1 Without projecting parts.
*2 Excluding supplied accessories.

Monitor Accessories

BKM-14L	420
BKM-15R	420
BKM-220D	421
BKM-243HS	421
BKM-255DV	422
BKM-30E14	422
BKM-30E20	422
BKM-320D	423
BKM-35H	423
BKM-61D	423
BKM-62HS	424
BKM-68X	424
MB-510	424
MB-522A	425
MB-523	425
MB-524	426
MB-525	426
MB-526	427
MB-527	427
MB-528	428
SMF-600	428
SMF-700	428
SU-558	429
SU-559	429
VF-509	429

BKM-14L Auto Setup Probe

Features

- External probe for colour temperature auto alignment
- Auto white balance •Colour temperature analysis



Applicable Models

BVM-A32E1WM Broadcast Video Monitor
BVM-A20F1M Broadcast Video Monitor
BVM-A14F5M Broadcast Video Monitor

Specifications

Mass

135 g (4 oz)

BKM-15R Monitor control unit

Features

- Central control unit
- up to 32 monitors can be controlled



Applicable Models

BVM-A32E1WM Broadcast Video Monitor
BVM-A20F1M Broadcast Video Monitor
BVM-A14F5M Broadcast Video Monitor

Specifications

LAN (10 BASE-T/100 BASE-TX) RJ-45x1
AC 100/240V or DC 5V in

Dimensions

424 (W) x 58.8 (H) x 247.8 (D) mm
(16 3/4 x 2 3/8 x 9 7/8 inches)

Mass

2.1kg (4 lb 10 oz)

BKM-220D SDI 4:2:2 Input Adaptor

SDI 4:2:2 Input Adaptor main unit providing video input and output connectors for the main unit and a decoder for serial digital component signals.



Features

- Decoder for serial digital component signals
- Serial digital input and output signal connector

Applicable Models

MEU-WX2 Multiformat Engine Unit

Supplied Accessories

Operating Instructions (1)

Specifications

General

Mass

Approx. 250 g (9 oz)

Voltage

+5 V (supplied from the main unit)

Power consumption

Approx. 1.5 W

Operating conditions

Temperature

0°C to 35°C (32°F to 95°F)

Optimum temperature

20°C to 30°C (68°F to 86°F)

Humidity

0% to 90% (no condensation)

Pressure

700hPa to 1060 hPa

Storage and transport conditions

Temperature

-10°C to 40°C (14°F to 104°F)

Humidity

0% to 90%

Pressure

700 hPa to 1060 hPa

Maximum external dimensions (w/h/d)

100 × 20 × 162 mm (4 × 13/16 × 6 1/2 inches)

Input/output connectors

Digital input

BNC × 2, with monitor output connector

Signal characteristics

Digital component signals

Sampling frequency

Y/R-Y/B-Y: 13.5 MHz

Quantization

10bits/sample

MONITOR OUT

Output signal amplitude:

800 mVp-p ± 10%

Output impedance:

75-ohms unbalanced

Transmission distance

200 m (approx. 656 ft) max. (When using 5C-2V coaxial cables (Fujikura, Inc.) or equivalent.)

BKM-243HS HD SDI & SDI Input Adaptor

HD SDI & SDI Input Adaptor providing video input and output connectors for the main unit and a decoder for HD/D1 serial digital component signals.



Features

- Decoder for serial digital component signals
- Serial digital input and output signal connector

Applicable Models

MEU-WX2 Multiformat Engine Unit

Supplied Accessories

Operating Instructions (1)

Specifications

General

Voltage

+3.3 V, +5 V (supplied from the main unit)

Power consumption

Approx. 2 W

Operating conditions

Temperature

0°C to 35°C (32°F to 95°F)

Optimum temperature

20°C to 30°C (68°F to 86°F)

Humidity

0% to 90% (no condensation)

Pressure

700hPa to 1060 hPa

Storage and transport conditions

Temperature

-10°C to 40°C (14°F to 104°F)

Humidity

0% to 90%

Pressure

700 hPa to 1060 hPa

Maximum external dimensions (w/h/d)

100 × 20 × 162 mm (4 × 13/16 × 6 1/2 inches)

Mass

Approx. 250 g (9 oz)

Input/output connectors

Digital input

BNC × 2, with monitor output connector

Signal characteristics

Digital component signals

Sampling frequency

D1-SDI: Y/R-Y/B-Y: 13.5 MHz

HD-SDI: Y/PB/PR: 74.25 MHz

Quantization

10bits/sample

MONITOR OUT

Output signal amplitude:

800 mVp-p ± 10%

Output impedance:

75-ohms unbalanced

Transmission distance

D1-SDI: 200 m (approx. 656 ft) max.

(When using 5C-2V coaxial cables (Fujikura, Inc.) or equivalent.)

HD-SDI: 100 m (approx. 328 ft) max.

(When using 5C-FB coaxial cables (Fujikura, Inc.) or equivalent.)

BKM-255DV DV Input Adaptor

Features

DV Input Adaptor

- Decodes DV signals into Audio/Video signals
- Two pairs of 6-pin DV connectors
- 400 Mbps communication
- Power supply is not supported.

Supplied Accessories

Operating Instructions (1)

Applicable Models

MEU-WX2 Multiformat Engine Unit

Specifications

General

Power requirements

+5 V (supplied from the main unit)

Power consumption

4W

Operating conditions

Temperature

0°C to 35°C (32°F to 95°F)

Optimum temperature

20°C to 30°C (68°F to 86°F)

Humidity

0% to 90% (no condensation)

Pressure

700 hPa to 1060 hPa

Storage and transport conditions

Temperature

-10°C to 40°C (14°F to 104°F)

Humidity

0% to 90%

Pressure

700 hPa to 1060 hPa

Maximum external dimensions (w/h/d)

100 x 20 x 161 mm (4 x 13/16 x 6 3/8 inches)

Mass

Approx. 230 g (0.5 lb)

Input/Output connectors

DV

6-pin (IEEE1394) x 2

Signal characteristics

Video Signals

Sampling frequency

Y/R-Y/B-y

13.5 MHz

Quantization

8 bits/sample

Audio Signals

Channel number

4 ch

Sampling frequency

2ch: 48 kHz

4ch: 32 kHz

Quantization

2ch: 16 bits

4ch: 12 bits



BKM-30E14 Rack Mount Kit

Features

- 19-inch EIA standard rack mount kit for 14-inch stand-alone monitors

Applicable Models

BVM-A14F5M Broadcast Video Monitor



BKM-30E20 Rack Mount Kit

Features

- 19-inch EIA standard rack mount kit for 20-inch monitors

Applicable Models

BVM-A20F1M Broadcast Video Monitor



BKM-320D SDI 4:2:2 Input adaptor

SDI 4:2:2 Input adaptor

Applicable Models

LMD-4420 Multiple LCD Monitors
LMD-5320 Multiple LCD Monitors
LMD-7220W Multiple LCD Monitors
LMD-2020 LCD Monitors
LMD-1420 LCD Monitors

Specifications

Signal characteristics

Input signal format:
SMPTE259M 270Mbps, 10bit, 4:2:2
component digital video

Input/output connectors

Input: BNC x 1
Output: D-sub9 pin

General

Power requirements: +5V(supplied from
the monitor)
Power consumption: Approx.1.7W
Dimensions(W x H X D):
Approx.68 x 20 x 56 mm(2 3/4 x 1 3/16
x 2 1/4 inches)
Mass: Approx.75g(3oz)



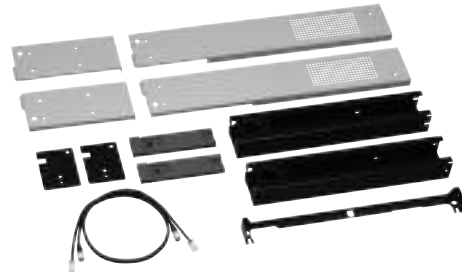
BKM-35H Control Unit Attachment Kit

Features

- Attachment kit to attach BKM-15R
to BVM-A20F1M

Applicable Models

BVM-A20F1M Broadcast Video Monitor



BKM-61D SDI/Analogue multi input adaptor

Features

- SDI input with monitor output and analogue composite
video inputs with loopthrough

Applicable Models

BVM-A32E1WM Broadcast Video Monitor
BVM-A20F1M Broadcast Video Monitor
BVM-A14F5M Broadcast Video Monitor

Specifications

SDI
2x inputs / 1x monitor output (BNC)
Composite PAL/NTSC/SECAM
3x inputs with loop through (BNC)
Y/C
1x input (BNC)

Dimensions

25 (W) x 256 (H) x 248 (D) mm
(1 x 10 1/8 x 9 7/8 inches)

Mass

930g (2 lb 1oz)



BKM-62HS HD SDI/SDI Input Adaptor

Features

- Automatic detection for HD/SD signal
- Multi format capability
- Individual or dual link HD signal

Applicable Models

BVM-A32E1WM Broadcast Video Monitor
BVM-A20F1M Broadcast Video Monitor
BVM-A14F5M Broadcast Video Monitor

Specifications

HD SDI / SDI

2x inputs with 2x Monitor output (BNC)
accept 4:4:4 HD, 4:2:2HD and 4:2:2
Multi format: 1080/48i, 1080/50i, 576/50p,
480/60p, 1035/60i, 1080/60i, 720/50p,
720/60p

Dimensions

25 (W) x 256 (H) x 248 (D) mm
(1 x 10 1/8 x 9 7/8 inches)

Mass

910g (2 lb)



BKM-68X HD/SD Analogue Component Input Adaptor

Features

- Analogue Component/RGB input

Applicable Models

BVM-A32E1WM Broadcast Video Monitor
BVM-A20F1M Broadcast Video Monitor
BVM-A14F5M Broadcast Video Monitor

Specifications

1x Y/Pb/Pr or RGB input with loop through (BNC)
1x Ext Sync with loop through (BNC)
Multi format: 1080/48i, 1080/50i, 576/50p,
480/60p, 1035/60i, 1080/60i, 720/50p, 720/60p

Dimensions

25 (W) x 256 (H) x 248 (D) mm
(1 x 10 1/8 x 9 7/8 inches)

Mass

900g (1 lb 16 oz)



MB-510 Mounting Attachment

Features

- Mounting attachment for attaching BKM-15R control unit to monitors

Applicable Models

BKM-15R Central Control Unit



MB-522A Mounting Bracket

Features

7U size Rack-Mount Bracket for LMD-172W

Applicable Model

LMD-172W LCD Monitor

Specifications

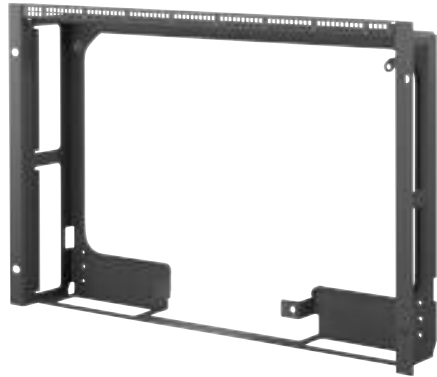
Dimensions

483 (W) x 310 (H) x 74 (D) mm

12 1/4 (W) x 19 1/8 (H) x 3 (D) inches

Mass

Approx. 1.4kg (3 lb 1oz)



MB-523 Mounting Bracket

Features

10U size Rack-Mount Bracket for LMD-212

Applicable Model

LMD-212 LCD Monitor

Specifications

Dimensions

483 (W) x 444.3 (H) x 87 (D) mm

19 1/8 (W) x 17 1/2 (H) x 3 1/2 (D) inches

Mass

3 Kg

6 lb 10 oz



MB-524 Mounting Bracket

7U size Rack-Mount Bracket for LMD-152

Applicable Models

LMD-152 LCD Monitor

Specifications

Dimensions

Approx. 482 (W) x 308 (H) x 70 (D) mm

Approx. 19 (W) x 12 1/8 (H) x 2 3/4 (D) inches

Mass

Approx. 1.4 kg (3 lb 1 oz)



MB-525 Mounting Bracket

Features

5U size Rack-Mount Bracket

Applicable Models

LMD-9050 LCD Monitor

LMD-9030 LCD Monitor

LMD-9020 LCD Monitor

Specifications

Dimension (W x H x D):

Approx. 484.4 x 222.5 x 158 mm

Mass:

Approx. 1.8kg



MB-526 Mounting Bracket

Features

7U size Rack-Mount Bracket

Applicable Models

LMD-1410 LCD Monitor

LMD-1420 LCD Monitor

Specifications

Dimensions (W x H x D):

Approx. 483 x 310 x 89 mm

Mass:

Approx. 2kg



MB-527 Mounting Bracket

Features

10U size Rack-Mount Bracket

Applicable Models

LMD-2010 LCD Monitor

LMD-2020 LCD Monitor

Specifications

Dimensions (W x H x D):

Approx. 483 x 443 x 73 mm

Mass:

Approx. 4kg



MB-528 Blank Panel

Applicable Models
MB-525

Specifications
Dimensions (W x H x D):
Approx. 216 x 208 x 49 mm
Mass:
Approx. 0.6kg



SMF-600 Display Interface Cable

Features

Cable to connect LMD Series to the
MEU-WX2

Applicable Models
LMD-322W/MEU-WX2 LCD Monitor/Multiformat Engine Unit
LMD-232W/MEU-WX2 LCD Monitor/Multiformat Engine Unit
LMD-172W/MEU-WX2 LCD Monitor/Multiformat Engine Unit
LMD-212/MEU-WX2 LCD Monitor/Multiformat Engine Unit
LMD-152/MEU-WX2 LCD Monitor/Multiformat Engine Unit

Specifications
10 metres length



SMF-700 Monitor Interface Cable

Features

Ethernet and DC power cable for
connection between BKM-15R and
BVM-A series

Applicable Models
BVM-A32E1WM Broadcast Video Monitor
BVM-A20F1M Broadcast Video Monitor
BVM-A14F5M Broadcast Video Monitor
BKM-15R Central Control Unit

Specifications
2 metres length



SU-558 Monitor Stand

Monitor Stand for LMD-Series

Applicable Models

LMD-152 LCD Monitor
LMD-172W LCD Monitor
LMD-212 LCD Monitor
LMD-232W LCD Monitor

Specifications

Mass

4.9 kg (10 lb 13 oz)

Size

240.2 (W) x 250.3 (D) x 191.6 (H) mm
(9 1/2 x 9 7/8 x 7 5/8 inches)

Stand movable range

Tilting angle of a monitor

74°

Tilting angle of the stand arm

64°



SU-559 Floor Stand

Monitor Stand for LMD-322W

Supplied Accessories

Front Top Cover (1)

Rear Top Cover (1)

Holders (2)

Screws A (2)

Screws B (4)

Screws C (2)

Applicable Models

LMD-322W LCD Monitor

Specifications

Mass

32 kg (70 lb 9 oz)

Size

602 (W) x 500 (D) x 676 (H) mm
23 11/16 (W) x 19 11/16 (D) x 26 5/8 (H) inches

Tilt angle

45°



VF-509 Monitor ENG Kit

Features

Monitor ENG Kit • Carrying Handle, Viewing Hood and Cable Protector are included.

Applicable Models

LMD-9050 LCD Monitor
LMD-9030 LCD Monitor
LMD-9020 LCD Monitor

Specifications

Mass:

Approx.: 1.3kg



SONY

VPL-CX61	432
VPL-CX63	433
VPL-CX76	434
VPL-CX86	435
VPL-FX52/L	436
VPL-FX40/L	437
VPL-FE40/L	438
VPL-VW100	439
VPL-VW50	440
QUALIA 004	441

VPL-CX61 Multi Purpose XGA Projector



High brightness and a range of additional features ensure that the VPL-CX61 will meet the requirements of even the most demanding multi purpose projector users.

Features

- Side Shot™ for flexibility
- Advanced Intelligent Auto Set-up and Auto Focus
- Brightness in ANSI Lumens: 2500
- Contrast Ratio: 350:1
- Projection System: 3 LCD panels 1 lens system
- Panel Size: 0.79 inch
- Native resolution: XGA 1024x768x3
- Max. Input Signal Resolution: SXGA+ 1400x1050
- Low Fan Noise: 28dB
- Screen Size (diagonally): 40 - 300 inch / 102 - 762 cm



Supplied Accessories

- Remote Control (RM-PJ5)
- Battery Remote
- Connecting Cable (HD 15-pin)
- Replacement Air Filter
- AC Power Cord

Optional Accessories

- Replacement Lamp
- Ceiling Mount Bracket
- Ceiling Security Mount Bracket

Inputs

- HD D-sub 15-pin (1)
- Composite Video (1)
- S-Video (1)
- Audio in (1)

Specifications

- Brightness in ANSI Lumens 2500
- Contrast Ratio 350:1
- Projection System 3 LCD panels 1 lens system
- LCD Panel Size 0.79 inch
- Native Resolution XGA 1024x768x3
- Max. Input Signal Resolution SXGA+ 1400x1050
- Lens
 - Standard zoom 1.2 times (Powered)
 - Optional No
- Fan Noise 28dB
- Keystone Correction
 - Vertical +/- 30°
 - Horizontal Side Shot

Lamp

- Type 190W UHP
- Life in hours 3000
- Replacement LMP-C190
- Screen Size (diagonally) 40 - 300 inch 102 - 762 cm
- Throwing Distance 80"/2m screen 2.47 - 2.84m 100"/2.5m screen 3.07 - 3.45m
- Ceiling Mount Bracket (optional accy) PSS-AT6
- Speaker 1W Mono
- HD ready No
- Filter Cleaning Time (Hours) 1000
- Off & Go Yes
- Power Consumption
 - Max: 280W
 - Standby: 5W
- Colour Silver/Black
- Dimensions (WxHxD) in mm 328x92.6x283.8
- Weight 3.7kg



VPL-CX63 Multi Purpose XGA Projector



High brightness and a range of additional features ensure that the VPL-CX63 will meet the requirements of even the most demanding multi purpose projector users.

Features

- Side Shot™ for flexibility •Advanced Intelligent Auto Set-up and Auto Focus •Brightness in ANSI Lumens: 3000 •Contrast Ratio: 350:1 •Projection System: 3 LCD panels 1 lens system •Panel Size: 0.79 inch
- Native resolution: XGA 1024x768x3 •Max. Input Signal Resolution: SXGA+ 1400x1050 •Low Fan Noise: 28dB
- Screen Size (diagonally): 40 - 300 inch / 102 - 762 cm



Supplied Accessories

- Remote Control (RM-PJ5)
- Battery Remote
- Connecting Cable (HD 15-pin)
- Replacement Air Filter
- AC Power Cord

Optional Accessories

- Replacement Lamp
- Ceiling Mount Bracket
- Ceiling Security Mount Bracket

Inputs

- HD D-sub 15-pin (1)
- Composite Video (1)
- S-Video (1)
- Audio in (1)

Specifications

- Brightness in ANSI Lumens
 - 3000
- Contrast Ratio
 - 350:1
- Projection System
 - 3 LCD panels
 - 1 lens system
- LCD Panel Size
 - 0.79 inch
- Native Resolution
 - XGA 1024x768x3
- Max. Input Signal Resolution
 - SXGA+ 1400x1050
- Lens
 - Standard zoom
 - 1.2 times (Powered)
 - Optional
 - No
- Fan Noise
 - 28dB
- Keystone Correction
 - Vertical
 - +/- 30°
 - Horizontal
 - Side Shot

Lamp

- Type
 - 190W UHP
- Life in hours
 - 3000
- Replacement
 - LMP-C190
- Screen Size (diagonally)
 - 40 - 300 inch
 - 102 - 762 cm
- Throwing Distance
 - 80"/2m screen
 - 2.47 - 2.84m
 - 100"/2.5m screen
 - 3.07 - 3.45m
- Ceiling Mount Bracket (optional accy)
 - PSS-AT6
- Speaker
 - 1W Mono
- HD ready
 - No
- Filter Cleaning Time (Hours)
 - 1000
- Off & Go
 - Yes
- Power Consumption
 - Max: 280W
 - Standby: 5W
- Colour
 - Silver/Black
- Dimensions (WxHxD) in mm
 - 328x92.6x283.8
- Weight
 - 3.7kg

VPL-CX76 Wireless Mobile XGA Projector



Wireless presentations are made truly simple with the VPL-CX76, using Sony Air Shot™ (Version 2) technology.

Features

- Air Shot™ (Version 2) technology enables connection using the 802.11b/g standard
- All wireless Air Shot™ accessories are supplied
- Brightness in ANSI Lumens: 2500
- Contrast Ratio: 350:1
- Projection System: 3 LCD panels 1 lens system
- Panel Size: 0.79 inch
- Native resolution: XGA 1024x768x3
- Max. Input Signal Resolution: SXGA+ 1400x1050
- Low Fan Noise: 30dB
- Screen Size (diagonally): 40 - 300 inch / 102 - 762 cm
- Memory Stick Standard, Pro and Duo



Supplied Accessories

- Remote Control (RM-PJM17 & PJP1)
- Battery Remote (2xR6 & 2xR03)
- Connecting Cable (HD 15-pin & USB)
- Replacement Air Filter
- Carrying Case (Soft)
- 802.11b/g Air Shot 2

Optional Accessories

- Replacement Lamp
- Ceiling Mount Bracket
- USB Wireless Module with Memory for PC

Inputs

- D sub 15-pin (Input A) (1)
- Composite Video (1)
- S-Video, Component Video (via Input A) (1)
- USB (1)
- Wireless LAN Card Slot (1)
- Audio in (1)
- Memory Stick Standard, Pro & Duo (1)

Specifications

- Brightness in ANSI Lumens
2500
- Contrast Ratio
350:1
- Projection System
3 LCD panels
1 lens system
- LCD Panel Size
0.79 inch
- Native Resolution
XGA 1024x768x3
- Max. Input Signal Resolution
SXGA+ 1400x1050
- Lens
Standard zoom
1.2 times (Powered)
Optional
No
- Fan Noise
30dB

Keystone Correction

- Vertical
+/- 30° (H=0)
- Horizontal
Side Shot

Lamp

- Type
165W UHP
- Life in hours
3000
- Replacement
LMP-C161

Screen Size (diagonally)

- 40 - 300 inch
102 - 762 cm
- Throwing Distance
80"/2m screen
2.4 - 2.7m
100"/2.5m screen
3.0 - 3.4m

Ceiling Mount Bracket (optional accy)

- PSS-AT4

Speaker

- 1W Mono

HD ready

- No

Filter Cleaning Time (Hours)

- 500

Off & Go

- Yes

Power Consumption

- Max: 240W
Standby: 9W

Colour

- Pearl White

Dimensions (WxHxD) in mm

- 298x69x244

Weight

- 2.9kg

VPL-CX86 Wireless Bright XGA Installation Projector



Wireless, stylish and fully packed with a great range of features suitable for standard installation, integration in AV systems, stand-alone display or connection to a LAN.

Features

- Air Shot™ (Version 2) technology enables a faster and more secure connection using the 802.11b/g standard
- All wireless Air Shot™ accessories are supplied
- Connectors include an RS-232C port for management and control of the projector
- Two 15-pin D Sub inputs allow for flexible connection
- Brightness in ANSI Lumens: 3000
- Contrast Ratio: 350:1
- Projection System: 3 LCD panels 1 lens system
- Panel Size: 0.79 inch
- Native resolution: XGA 1024x768x3
- Max. Input Signal Resolution: SXGA+ 1400x1050
- Low Fan Noise: 28dB
- Screen Size (diagonally): 40 - 300 inch / 102 - 762 cm
- Memory Stick Standard, Pro and Duo



Supplied Accessories

- Remote Control (RM-PJM17 & PJP1)
- Battery Remote (2xR6 & 2xRC3)
- Connecting Cable (HD 15-pin & USB)
- Replacement Air Filter
- Carrying Case (Soft)
- 802.11b/g Air Shot 2

Optional Accessories

- Replacement Lamp
- Ceiling Mount Bracket
- USB Wireless Module with Memory for PC

Inputs

- D sub 15-pin (Input A/B) (2)
- Composite Video (1)
- S-Video (1)
- Component Video (via Input A) (1)
- USB (1)
- RS-232C (1)
- Wireless LAN Card slot (1)
- Audio In (2)
- Memory Stick Standard, Pro & Duo

Specifications

- Brightness in ANSI Lumens
3000
- Contrast Ratio
350:1
- Projection System
3 LCD panels
1 lens system
- LCD Panel Size
0.79 inch
- Native Resolution
XGA 1024x768x3
- Max. Input Signal Resolution
SXGA+ 1400x1050
- Lens
Standard zoom
1.2 times (Powered)
Optional
No
- Fan Noise
28dB

- Keystone Correction
Vertical
+/- 30° (H=0)
Horizontal
Side Shot
- Lamp
Type
190W UHP
Life in hours
3000
Replacement
LMP-C190
- Screen Size (diagonally)
40 - 300 inch
102 - 762 cm
- Throwing Distance
80"/2m screen
2.4 - 2.7m
100"/2.5m screen
3.0 - 3.4m
- Ceiling Mount Bracket (optional accy)
PSS-AT3
- Speaker
1W Mono
HD ready
No
- Filter Cleaning Time (Hours)
1000
- Off & Go
Yes
- Direct On/Off
Yes
- Power Consumption
Max: 280W
Standby: 7W
- Colour
Pearl White
- Dimensions (WxHxD) in mm
328x93x284
- Weight
3.8kg

VPL-FX52/L Bright XGA Data Projector



The VPL-FX52 delivers a high brightness of 6000 ANSI lumens in a stylish and sophisticated design. Its outstanding functionality includes the ability to project high quality images, networking capability and installation flexibility, making it ideal for almost any large conference room or auditorium. The VPL-FX52L has three optional lenses for long, short and rear projection applications.

Features

- Dynamic Detail Enhancer (DDE) for high quality video images
- Lens Shift
- 90° tilt function
- Brightness in ANSI Lumens: 6000
- Contrast Ratio: 1000:1
- Projection System: 3 LCD panels 1 lens system
- Panel Size: 1.3 inch
- Native resolution: XGA 1024x768x3
- Max. Input Signal Resolution: UXGA 1600x1200
- Fan Noise: 35dB
- Screen Size (diagonally): 40 - 300 inch / 102 - 762 cm



Supplied Accessories

- Remote Control (RM-PJM17)
- Battery Remote (2xR6 AA)
- Replacement Air Filter

Optional Accessories (VPL-FX52L)

- 3 lenses for long, short and rear projection applications

Inputs

- D sub 15-pin (Input A)
- Composite Video (1)
- S-Video (1)
- Component Video (via 5BNC)
- DVI-D (Input B)
- RS-232C (1)
- CTRL S (1)
- 5BNC (Input C)
- Ether (RJ-45)
- Trigger Out (1) 12 V
- (Output) Monitor Out

Specifications

- Brightness in ANSI Lumens
6000
- Contrast Ratio
1,000:1
- Projection System
3 LCD panels
1 lens system
- LCD Panel Size
1.3 inch
- Native Resolution
XGA 1024x768x3
- Max. Input Signal Resolution
UXGA 1600x1200
- Lens
 - Standard zoom (VPL-FX52)
1.3 times (Powered)
 - Optional (VPL-FX52/L)
VPLL-FM21/ ZM31/ZM101
- Fan Noise
35dB

- Keystone Correction
Vertical
+/- 20°
Horizontal
No
- Lamp
Type
300W UHP
Life in hours
2500
Replacement
LMP-F300
- Screen Size (diagonally)
40 - 300 inch
102 - 762 cm
- Throwing Distance
80"/2m screen
3.06 - 3.74m
100"/2.5m screen
3.85 - 4.7m
- Ceiling Mount Bracket (optional accy)
PSS-620
- Speaker
No
- HD ready
Accept HD Signal
Scan to XGA
- Filter Cleaning Time (Hours)
1500
- Off & Go
Yes
- Direct On/Off
Yes
- Power Consumption
Max: 400W
Standby: 7W
- Colour
White & Silver
- Dimensions (WxHxD) in mm
420x169x502 (VPL-FX52)
420x169x464 (VPL-FX52L)
- Weight
10.5kg (VPL-FX52)
9.1kg (VPL-FX52L)

VPL-FX40/L XGA Network Projector



BrightEra.

Delivering an extremely bright 4000 ANSI lumens in a slick sophisticated body, the VPL-FX40 is an excellent projector for high-impact multimedia presentations. For applications ranging from business conferences and seminars to education, in locations such as boardrooms, large conference rooms, R&D facilities, and university classrooms, this projector will captivate audiences with breathtaking image quality.

The VPL-FX40 and VPL-FE40 installation projectors are the first in our new line up to incorporate our new BrightEra™ inorganic alignment layer 0.79" LCD panels. The VPL-FX40L has three optional lenses.



Features

- Dynamic Detail Enhancer (DDE) for high quality video images
- Lens Shift
- 90° tilt function
- Brightness in ANSI Lumens: 4000
- Contrast Ratio: 700:1
- Projection System: 3 inorganic LCD panels 1 lens system
- Panel Size: 0.79 inch
- Native resolution: XGA 1024x768
- Max. Input Signal Resolution: 1024 x 768 x 3
- Fan Noise: 28dB
- Screen Size (diagonally): 40 - 600 inch (for VPL-FX40L, screen coverage is 40-600 inches with VPLL-Z1024 or VPLL-Z1032/ 60-300 inches with VPLL-1008)

Supplied Accessories

- Remote Commander Unit (x1)
- AA batteries (x2)
- Operating instructions and application software (x1)
- Quick reference manual (x1)
- Warranty card (x1)

Optional Accessories

- Replacement lamp (LMP-F270)
- Ceiling Bracket (PSS-610NL)
- Ziris Light management software

Optional lenses for VPL-FX40L

- VPLL-1008 Fixed lens
- VPLL-Z1024 Zoom lens
- VPLL-Z1032 Zoom lens

Inputs

VIDEO IN

- Video
 - Composite Video (RCA phono jack)
- S Video
- Y/C Mini DIN 4-pin
- Audio
 - Stereo (RCA phono jack)

INPUT A

- Analogue RGB
- HD D-sub 15-pin (female)
- Audio
 - Stereo mini jack

INPUT B

- Analogue RGB
- HD D-sub 15-pin (female)
- Audio
 - Stereo mini jack

INPUT C

- Analogue RGB/component
- BNC x5

Audio

- Stereo mini jack
- INPUT D
 - Digital RGB/Audio
 - Digital RGB/Y CB (PB) CR (PR):
 - HDMI (HDCP)
- INPUT E
 - Network
 - RJ45: 100Base-TX/10Base-T
- OUTPUT
 - Monitor out
 - Analogue RGB: HD D-sub 15pin
 - Audio
 - Stereo mini jack (variable out)
- REMOTE RS-232C
 - D-sub 9 pin (female)
- Control S IN
 - Stereo mini jack (plug-in-power)

Key Specifications

- Native Resolution
 - XGA (1024x 768)
- Max Signal Input Resolution
 - 1024 x 768 x 3
- Panel Type
 - 0.79" TFT LCD x 3
- Projection System
 - 3 Inorganic LCD panels, 1 lens system
- Brightness
 - 4000 ANSI lumen
- Contrast Ratio
 - 700:1
- Fan Noise
 - 28dB
- Weight
 - Approx 9.8 kg (Approx. 9.0 kg for VPL-FX40L)
- Dimensions (W x H x D)
 - 532 x 145 x 352 mm

General

- Standard Lens
 - 1.3 times powered zoom lens*
- Vertical Keystone Correction
 - ± 30°
- Vertical and Horizontal Shift
 - V Shift 0 - 1/2V / H Shift 1/10 H
- Lamp Type
 - 275W Ultra High Pressure
- Lamp Life (Replacement time)
 - 2500 H
- Max Power Consumption
 - 400W
- Standby Power Consumption
 - 15W (Standby mode: Standard / 0.5W (low))

Throwing Distance (Standard Lens)

- Min - Max Screen Size (diagonally)
 - 40 - 600 inch**
- 40-inch / 1m screen
 - 1.48 - 1.9m
- 80-inch / 2m screen
 - 3.03 - 3.86m
- 100-inch / 2.5m screen
 - 3.81 - 4.84m
- 150-inch / 3.8m screen
 - 5.74 - 7.29m
- 200-inch / 5.1m screen
 - 7.68 - 9.74m
- 300-inch / 7.6m screen
 - 11.55 - 14.64m
- 600-inch / 15.2m screen
 - 23.16 - 29.35m

* Not supplied with the VPL-FX40L.

** For VPL-FX40L, screen coverage is 40-600 inches with VPLL-Z1024 or VPLL-Z1032 / 60-300 inches with VPLL-1008.

VPL-FE40/L SXGA+ Data Projector



BrightEra.

Delivering an extremely bright 4000 ANSI lumens in a slick sophisticated body, the VPL-FE40 is an excellent projector for high-impact multimedia presentations. For applications ranging from business conferences and seminars to education, in locations such as boardrooms, large conference rooms, R&D facilities, and university classrooms, this projector will captivate audiences with breathtaking image quality.

The VPL-FX40 and VPL-FE40 installation projectors are the first in our new line up to incorporate our new BrightEra™ inorganic alignment layer 0.79" LCD panels. The VPL-FE40L has three optional lenses.



Features

- Dynamic Detail Enhancer (DDE) for high quality video images
- Lens Shift
- 90° tilt function
- Brightness in ANSI Lumens: 4000
- Contrast Ratio: 700:1
- Projection System: 3 inorganic LCD panels 1 lens system
- Panel Size: 0.79 inch
- Native resolution: SXGA+ 1400 x 1050
- Max. Input Signal Resolution: 1400 x 1050 x 3
- Fan Noise: 35dB
- Screen Size (diagonally): 40 - 600 inch (for VPL-FE40L, screen coverage is 40-600 inches with VPLL-Z1024 or VPLL-Z1032/ 60-300 inches with VPLL-1008)

Supplied Accessories

- Remote Commander Unit (x1)
- AA batteries (x2)
- Operating instructions and application software (x1)
- Quick reference manual (x1)
- Warranty card (x1)

Optional Accessories

- Replacement lamp (LMP-F270)
- Ceiling Bracket (PSS-610NL)
- Ziris Light management software

Optional lenses for VPL-FE40L

- VPLL-1008 Fixed lens
- VPLL-Z1024 Zoom lens
- VPLL-Z1032 Zoom lens

Inputs

VIDEO IN

Video

- Composite Video (RCA phono jack)

S Video

- Y/C Mini DIN 4-pin

Audio

- Stereo (RCA phono jack)

INPUT A

Analogue RGB

- HD D-sub 15-pin (female)

Audio

- Stereo mini jack

INPUT B

Analogue RGB

- HD D-sub 15-pin (female)

Audio

- Stereo mini jack

INPUT C

- Analogue RGB/component BNC x5

Audio

- Stereo mini jack

INPUT D

Digital RGB/Audio

- Digital RGB/Y CB (PB) CR (PR): HDMI (HDCP)

INPUT E

Network

- RJ45: 100Base-TX/10Base-T

OUTPUT

Monitor out

- Analogue RGB: HD D-sub 15pin

Audio

- Stereo mini jack (variable out)

REMOTE RS-232C

- D-sub 9 pin (female)

Control S IN

- Stereo mini jack (plug-in-power)

Key Specifications

Native Resolution

- SXGA+ (1400 x 1050)

Max Signal Input Resolution

- 1400 x 1050 x 3

Panel Type

- 0.79" TFT LCD x 3

Projection System

- 3 Inorganic LCD panels, 1 lens system

Brightness

- 4000 ANSI lumen

Contrast Ratio

- 700:1

Fan Noise

- 35dB

Weight

- Approx 9.8 kg (Approx. 9.0 kg for VPL-FE40L)

Dimensions (W x H x D)

- 532 x 145 x 352 mm

General

Standard Lens

- 1.3 times powered zoom lens*

Vertical Keystone Correction

- ± 30°

Vertical and Horizontal Shift

- V Shift 0 - 1/2V / H Shift 1/10 H

Lamp Type

- 275W Ultra High Pressure

Lamp Life (Replacement time)

- 2500 H

Max Power Consumption

- 400W

Standby Power Consumption

- 15W (Standby mode: Standard / 0.5W (low))

Throwing Distance (Standard Lens)

Min - Max Screen Size (diagonally)

- 40 - 600 inch**

40-inch / 1m screen

- 1.48 - 1.9m

80-inch / 2m screen

- 3.03 - 3.86m

100-inch / 2.5m screen

- 3.81 - 4.84m

150-inch / 3.8m screen

- 5.74 - 7.29m

200-inch / 5.1m screen

- 7.68 - 9.74m

300-inch / 7.6m screen

- 11.55 - 14.64m

600-inch / 15.2m screen

- 23.16 - 29.35m

* Not supplied with the VPL-FE40L.

** For VPL-FE40L, screen coverage is 40-600 inches with VPLL-Z1024 or VPLL-Z1032 / 60-300 inches with VPLL-1008.

VPL-VW100



The VPL-VW100 combines the innovations from two award winning products; VPL-VW12HT and QUALIA 004 to deliver the best of both. Outstanding picture quality, with a contrast ratio of 15,000:1.

Features

- 3 Sony SXR D™ Panels; 6.22 million pixels with narrow inter-pixel spacing of 0.35µm to deliver film quality smoothness
- Pure Xenon lamp (400W) for more natural colour reproduction
- ARC-F (All Range Crisp Focus) Lens designed specifically to optimise the full HD SXR D™ panel. Motorised lens zoom range of 1.8 times
- Contrast Ratio: 15,000:1 (Auto) 6,000:1 (On) 3,000:1 (Off)
- Brightness in ANSI Lumens: 800
- Projection System: 3 SXR D™ panels 1 lens system
- Panel Size: 0.61 inch
- Native resolution: Full HD 1920x1080x3
- Low Fan Noise: 22dB
- Screen Size (diagonally): 40 - 300 inch / 102 - 762 cm

Supplied Accessories

- Remote Control (RM-PJW100)
- Battery Remote (2xR6 AA)
- Replacement Air Filter (Air Filter Cover)
- Image Director 2 Software CD-ROM

Optional Accessories

- Replacement Lamp (LMP-H400)
- Matching Ceiling Mount Bracket (PSS-H10)

Inputs

- D sub 15-pin (Input A)
- Composite Video (1)
- S-Video (1)
- Component Video (1)
- HDMI (1)
- DVI-D (1)
- RS-232C (1)
- Ether (RJ-45)
- Trigger Output (1) 12 V

Specifications

- Technology
 - SXR D
- Brightness in ANSI Lumens
 - 800 / 400
- Contrast Ratio
 - 3,000 - 15,000:1
- Projection System
 - 3 SXR D panels
 - 1 lens system
- LCD Panel Size
 - 0.61 inch
- Native Resolution
 - Full HD 1920x1080x3
- Max. Input Signal Resolution
 - Full HD
- Lens
 - Standard zoom
 - 1.8 times (Powered)
 - Optional
 - No

Fan Noise

- 22dB
- Keystone Correction
 - Vertical
 - Lens Shift & VK
 - Horizontal
 - Lens Shift
 - (man fine adjust)
- Lamp
 - Type
 - 400W Pure Xenon
 - Life in hours
 - 2500
 - Replacement
 - LMP-H400
- Screen Size (diagonally)
 - 40 - 300 inch
 - 102 - 762 cm
- Throwing Distance
 - 80"/2m screen
 - 2.5 - 4.3m
 - 100"/2.5m screen
 - 3.1 - 5.3m
- Ceiling Mount Bracket (optional accy)
 - PSS-H10
- Speaker
 - No
- HD ready
 - Yes
- Filter Cleaning Time (Hours)
 - 2500
- Power Consumption
 - Max: 610W
 - Standby: 10W (eco 0.5W)
- Colour
 - Glossy White
- Dimensions (WxHxD) in mm
 - 496x175x574
- Weight
 - 19kg



VPL-VW50



1080 Full HD 3 SXR™ high picture performance projector with two HDMI inputs, which inherited the technologies from the EISA Award winning VPL-VW100.

Features

- 3 Sony SXR™ Panels; 6.22 million pixels with narrow inter-pixel spacing of 0.35µm to deliver film quality smoothness
- 200W UHP lamp
- ARC-F (All Range Crisp Focus) Lens designed specifically to optimise the full HD SXR™ panel. Motorised lens zoom range of 1.8 times
- Advanced Iris 2 (Settings: Auto1, Auto2, Manual, Off)
- Contrast Ratio: 15,000:1 (Auto) 6,000:1 (On) 3,000:1 (Off)
- Brightness in ANSI Lumens: 900
- Projection System: 3 SXR™ panels 1 lens system
- Panel Panel Size: 0.61 inch
- Native resolution: Full HD 1920x1080x3
- Max. Input Signal Resolution: Full HD
- Two HDMI™ inputs
- Accepts 1080/24p input signals
- Low Fan Noise: 22dB
- Screen Size (diagonally): 40 - 300 inch / 102 - 762 cm



Supplied Accessories

- Remote Control (RM-PJW100)
- Battery Remote (2xR6 AA)
- Replacement Air Filter (Air Filter Cover)
- Image Director 2 Software CD-ROM

Optional Accessories

- Replacement Lamp (LMP-H200)
- Matching Ceiling Mount Bracket (PSS-H10)

Inputs

- D sub 15-pin (Input A)
- Composite Video (1)
- S-Video (1)
- Component Video (1)
- HDMI (2)
- RS-232C (1)
- Trigger Output (1) 12 V

Specifications

- Technology
 - SXR
- Brightness in ANSI Lumens
 - 900 / 360
- Contrast Ratio
 - 3,000 - 15,000:1
- Projection System
 - 3 SXR panels
 - 1 lens system
- LCD Panel Size
 - 0.61 inch
- Native Resolution
 - Full HD 1920x1080x3
- Max. Input Signal Resolution
 - Full HD
- Lens
 - Standard zoom
 - 1.8 times (Powered)
 - Optional
 - No
- Fan Noise
 - 22dB

- Keystone Correction
 - Vertical
 - Lens Shift & VK
 - Horizontal
 - Lens Shift (man fine adjust)
- Lamp
 - Type
 - 200W UHP
 - Life in hours
 - 3000
 - Replacement
 - LMP-H200
- Screen Size (diagonally)
 - 40 - 300 inch
 - 102 - 762 cm
- Throwing Distance
 - 80"/2m screen
 - 2.5 - 4.3m
 - 100"/2.5m screen
 - 3.1 - 5.3m
- Ceiling Mount Bracket (optional accy)
 - PSS-H10
- Speaker
 - No
- HD ready
 - Yes
- Filter Cleaning Time (Hours)
 - 2500
- Power Consumption
 - Max: 300W
 - Standby: 8W (eco 0.5W)
- Colour
 - Glossy White
- Dimensions (WxHxD) in mm
 - 395 x 173.5 x 471.4
- Weight
 - 11kg

QUALIA 004

From conception through design and manufacture, QUALIA 004 is born to serve a single purpose: to create extraordinary sensory experiences capable of evoking powerful emotional response. This world beyond compromise comes brilliantly to life through this breathtaking innovation.

Features

- 3 Sony SXRDTM Panels; 6.22 million pixels with narrow inter-pixel spacing of 0.35µm to deliver film quality smoothness
- Pure Xenon lamp (700W) for more natural colour reproduction
- Choice of three optional high quality Carl Zeiss® Vario-Sonnar® lenses (Mid, Wide, Tele)
- Contrast Ratio: 2,000:1
- Brightness in ANSI Lumens: 1600
- Projection System: 3 SXRDTM panels 1 lens system
- Panel Size: 0.78 inch
- Native resolution: Full HD 1920x1080x3
- Low Fan Noise: 24dB
- Screen Size (diagonally): 40 - 300 inch / 102 - 762 cm

Supplied Accessories

- 2 Remote Controls (RM-PJR1F+R1S)
- Battery Remote (6xR03 AAA)
- Replacement Air Filter (1xPK-R1FL)
- Image Director 2 Software CD-ROM
- Ceiling Mount Bracket (PSS-100)

Optional Accessories

- Required Option: 1 Carl Zeiss® Vario-Sonnar® lens is required, not supplied. Choose from a selection of three lenses (mid, wide, tele)
- Replacement lamp (LMP-H700)

Inputs

- Composite Video (1)
- S-Video (1)
- Component Video (Input A)
- HDMI (1)
- DVI-D (1)
- RS-232C (1)
- CTRL S (1)
- 5BNC (Input B)
- Ether (RJ-45)
- Trigger Out (1) 12 V

Specifications

- Technology
SXRDTM
- Brightness in ANSI Lumens
1600 / 600
- Contrast Ratio
1,400 - 2,000:1
- Projection System
3 SXRDTM panels
1 lens system
- LCD Panel Size
0.78 inch
- Native Resolution
Full HD 1920x1080x3
- Max. Input Signal Resolution
Full HD

Lens

- Standard zoom
No lens supplied
- Optional
VPLL-ZP310
Wide Zoom x1.34
f = 25-33mm
- VPLL-ZP400
Mid Zoom x1.43
f = 32-45mm
- VPLL-ZP550
Tele Zoom x1.4
f = 44-61mm

Fan Noise

- 24dB
- Keystone Correction
Vertical
Yes
- Horizontal
Man fine adjust

Lamp

- Type
700W Pure Xenon
- Life in hours
2200
- Replacement
LMP-H700

- Screen Size (diagonally)
40 - 300 inch
102 - 762 cm

Throwing Distance

- 80"/2m screen
2.5 - 6.2m
- 100"/2.5m screen
3.2 - 7.8m

- Ceiling Mount Bracket
PSS-100 (supplied)

Speaker

- No
- HD ready
Yes

Filter Cleaning Time (Hours)

- 2200
- Power Consumption
Max: 980W
Standby: 7.8W
- Colour
Silver & Dark Blue
- Dimensions (WxHxD) in mm
598x206x753
- Weight
40kg



SONY

Large Venue Projectors

SRX-R110CE	444
SRX-R105CE	444
SRX-S110	445
SRX-S105	445

SRX-R110CE SXRD 4K Projectors SRX-R105CE

Sony's large venue projectors, tailored with stunning features and picture performance to address the quality-critical demands of high definition video and high resolution images for fixed installations, events & staging, post production and digital cinema applications.

Features

- 4K resolution 4096(V) x 2160(H) pixel image
- Accepts a wide selection of input formats using supplied analogue input board and optional digital input boards
- High contrast ratio of greater than 1800:1
- Selectable preset gamma curves for accurate colour reproduction
- Multiple screen capability; 4096 x 2160 pixels image in single-mode, two HD 1920 x 1080 pixel images in dual-mode, four HD 1920 x 1080 pixel images in quad-mode
- Dual lamp system operated in single and dual-lamp modes
- PC-based control of set-up parameters, input configurations, colourimetry control and maintenance settings

Supplied Accessories

LKRI-001 Analogue input board
RM-PJ4K Simple remote controller unit
PC set-up software CD-ROM (PC not supplied)

Optional Accessories

LKRL-90 Projection lens, x0.9
LKRL-Z115 Projection lens, 1.5 to 1.9 zoom
LKRL-Z120 Projection lens, 1.9 to 2.3 zoom
LKRL-Z125 Projection lens, 2.3 to 4.0 zoom
LKRL-Z140 Projection lens, 4.0 to 7.0 zoom
LKRX-105 Xenon lamp for SRX-R105CE/SRX-S105
LKRX-110 Xenon lamp for SRX-R110CE/SRX-S110
LKRX-B105 Xenon lamp house for SRX-R105CE/SRX-S105
LKRX-B110 Xenon lamp house for SRX-R110CE/SRX-S110
LKRA-001 8-inch exhaust duct adaptor

Optional Boards

LKRI-002 SDI and HD-SDI (4:2:2) input board
LKRI-003 Dual-link HD-SDI input board
LKRI-004 DVI-D input board

Specifications

SXRD Device

Display device

SXRD (Silicon X-tal Reflective Display)

Size

1.55" across diagonal

Resolution

4096(V) x 2160(H)

Reflectivity

72%

Contrast ratio (as device)

4000:1



Optical

Projection system

3-SXRD panel, prism colour integrated system

Lamp

2KW Xenon lamp x 2 for SRX-R110CE/SRX-S110

1KW Xenon lamp x 2 for SRX-R105CE/SRX-S105

Light output

10,000 ANSI lumens \pm 10% for SRX-R110CE

5,000 ANSI lumens \pm 10% for SRX-R105CE

Screen coverage

14 feet to 51 feet/4.5m to 15.5m measured horizontally

General

Contrast ratio (of projector)

>1800:1

Power requirements

AC 200 to 240V 50/60Hz

Power consumption

5.4KW for SRX-R110CE

3KW for SRX-R105CE

Dimensions (W x H x D)

Approx. 740 x 500 x 1320 mm

Mass

Approx. 110 Kg

Input Boards

LKRI-001 Analogue input board

BNC x 5 HD/SD input board

RGB/YCrCb selectable

LKRI-002 SDI and HD-SDI (4:2:2) input board

BNC x 2 (Input x 1 and loop through out x 1)

HD-SDI (SMPTE-292M) and SDI (SMPTE-259M)

LKRI-003 Dual-link HD-SDI input board

BNC x 2 (input x 2, loop through out x 2)

HD-SDI single-link 4:2:2 SMPTE-292M

HD-SDI single-link 4:2:2 with 2048 support

Dual-link HD-SDI 4:4:4 RGB SMPTE-372M

Dual-link HD-SDI 4:4:4 RGB with 2048 support

LKRI-004 DVI-D input board

DVI 24-pin, male x2

DVI-D, AUX

SRX-S110 SXRD 4K Projectors SRX-S105

Sony's new, large venue projectors, tailored with stunning features and picture performance to address the critical demands of Visualisation, Simulation and Command & Control applications.

Features

- 4K resolution 4096(V) x 2160(H) pixel image
- Accepts a wide range of input formats using the standard DVI-D input and optional digital input boards
- 60P frame refresh
- High contrast ratio of greater than 1800:1
- Selectable preset gamma curves for accurate colour reproduction
- Multiple screen capability; 4096 x 2160 pixels image in single-mode, two HD 1920 x 1080 pixel images in dual-mode, four HD 1920 x 1080 pixel images in quad-mode
- Dual lamp system operated in single and dual-lamp modes
- PC-based control of set-up parameters, input configurations, colourimetry control and maintenance settings

Supplied Accessories

RM-PJ4K Simple remote controller unit
PC set-up software CD-ROM (PC not supplied)

Optional Accessories

LKRL-90 Projection lens, x0.9
LKRL-Z115 Projection lens, 1.5 to 1.9 zoom
LKRL-Z120 Projection lens, 1.9 to 2.3 zoom
LKRL-Z125 Projection lens, 2.3 to 4.0 zoom
LKRL-Z140 Projection lens, 4.0 to 7.0 zoom
LKRX-105 Xenon lamp for SRX-R105CE/SRX-S105
LKRX-110 Xenon lamp for SRX-R110CE/SRX-S110
LKRX-B105 Xenon lamp house for SRX-R105CE/SRX-S105
LKRX-B110 Xenon lamp house for SRX-R110CE/SRX-S110
LKRA-001 8-inch exhaust duct adaptor

Optional Boards

LKRI-001 Analogue input board
LKRI-002 SDI and HD-SDI (4:2:2) input board
LKRI-003 Dual-link HD-SDI input board
LKRI-004 DVI-D input board

Specifications

SXRD Device

Display device

SXRD (Silicon X-tal Reflective Display)

Size

1.55" across diagonal

Resolution

4096(V) x 2160(H)

Reflectivity

72%

Contrast ratio (as device)

4000:1



Optical

Projection system

3-SXRD panel, prism colour integrated system

Lamp

2KW Xenon lamp x 2 for SRX-S110

1KW Xenon lamp x 2 for SRX-S105

Light output

10,000 ANSI lumens \pm 10% for SRX-S110

5,000 ANSI lumens \pm 10% for SRX-S105

Screen coverage

14 feet to 51 feet/4.5m to 15.5m measured horizontally

General

Contrast ratio (of projector)

>1800:1

Power requirements

AC 200 to 240V 50/60Hz

Power consumption

5.4KW for SRX-S110

3KW for SRX-S105

Dimensions (W x H x D)

Approx. 740 x 500 x 1320 mm

Mass

Approx. 110 Kg

Input Boards

LKRI-001 Analogue input board

BNC x 5 HD/SD input board

RGB/YCrCb selectable

LKRI-002 SDI and HD-SDI (4:2:2) input board

BNC x 2 (Input x 1 and loop through out x 1)

HD-SDI (SMPTE-292M) and SDI (SMPTE-259M)

LKRI-003 Dual-link HD-SDI input board

BNC x 2 (input x 2, loop through out x 2)

HD-SDI single-link 4:2:2 SMPTE-292M

HD-SDI single-link 4:2:2 with 2048 support

Dual-link HD-SDI 4:4:4 RGB SMPTE-372M

Dual-link HD-SDI 4:4:4 RGB with 2048 support

LKRI-004 DVI-D input board

DVI 24-pin, male x2

DVI-D, AUX

SONY

Recording Media

PFD23A Disc	448
HDCAM SR tape	448
HDCAM tape	449
MPEG IMX tape	449
Digital Betacam tape	450
Digital Master™ tape for HDV	450
DVCAM tape	451

PFD23A Disc Professional Disc

Professional optical disc for XDCAM and XDCAM HD products
PFD23A

Features

- Designed together with XDCAM decks for maximum system performance
- Writing speed increased up to 2.4x
- Totally flexible 'Format Free' recording
- High capacity Optical Disc - Up to 23.3 GB of storage
- Quick random access saves time and improves reliability
- Ultra fast data transfer (Write)
- Outstanding picture quality across HD, MPEG IMX & DVCAM
- Tough enough for extreme temperatures & environments



Applicable Models

- PDW-1500 XDCAM Compact Deck (Recording and Playback)
- PDW-510P XDCAM Camcorder (DVCAM Recording)
- PDW-530P XDCAM Camcorder (MPEG IMX/DVCAM Recording)
- PDW-F30 Entry level XDCAM HD Deck
- PDW-F330 Entry level XDCAM HD Camcorder
- PDW-F350L Top-of-the-range XDCAM HD Camcorder
- PDW-F70 XDCAM HD Deck
- PDW-V1 XDCAM Mobile Deck (Playback and File Recording)
- PDW-R1 XDCAM Field Recorder (Playback and Recording)

Specifications

- Storage capacity: 23.3 GB
- Laser wavelength: 405 nm (blue-violet)
- Data transfer (writing) rate: 86.4 Mb/s (per optical head)
- Disc diameter: 120 mm (4 5/8 inches)
- Cartridge dimensions: 129 (W) x 131 (H) x 9 (D) mm (5 1/8 x 5 1/4 x 3/8 inches)
- Mass: 90 g (3 oz)
- Recording format: Phase change recording

BCT-SR Series HDCAM SR Tape

Small / Large / Cleaning

The most advanced metal particle tape in the whole broadcast family

Features

- Expanding High Definition family
- Equipped with the TeleFile™ system to allow quick viewing and access to recordings
- Ultrafine high-performance metal particles and new calendaring technology realise high output and high C/N
- Durability to withstand repeated playbacks and edits



Applicable Models

- SRW-5000
- SRW-5500
- SRW-1

Specifications

- Model Playing time (min.)
- BCT-6SR 6
- BCT-33SR 33
- BCT-40SR 40
- BCT-64SRL 64
- BCT-94SRL 94
- BCT-124SRL 124
- BCT-HD12CL 12

Applicable Models

- BCT-6SR
- BCT-33SR
- BCT-40SR
- BCT-64SRL
- BCT-94SRL
- BCT-124SRL
- BCT-HD12CL

BCT-HD Series HDCAM Tape

Small / Large / Cleaning

HDCAM has become a worldwide standard for production and exchange of high quality HD content. The hardware line-up has been strengthened with the addition of the HDW-1800 series for 2007.

Features

- Using Advanced Metal Tape Technology (MP++)
- Setting a new standard in high-density recording with ultra-fine magnetic particles
- Developed for multi-generation operations (23.98PsF, 24PsF, 25PsF, 29.97PsF, and 50i, 59.94i interlaced)
- Outstanding archive potential using specially developed alumina-silica protective layer
- Distinctive HDCAM cassette design with bright orange antistatic lid



Applicable Models

HDW-F900R
HDW-750PC
HDW-750P
HDW-730S
HDW-1800
HDW-D1800
HDW-2000
HDW-D2000
HDW-M2000P
HDW-M2100P
HDW-S280/1

Specifications

Model	Playing time (min.)
BCT-6HD	6
BCT-12HD	12
BCT-22HD	22
BCT-32HD	32
BCT-40HD	40
BCT-34HDL	34
BCT-64HDL	64
BCT-94HDL	94
BCT-124HDL	124
BCT-HD12CL	12

BCT-MX Series MPEG IMX Tape

Small / Large / Cleaning

The BCT-MX Series cassettes are intrinsically designed for reliability, durability and to support high-density recording. MPEG IMX uses open MPEG-2 compression at 30Mbps, 40Mbps and 50Mbps as advocated by the EBU/SMPTE.

Features

- High picture quality (video NET: 50 Mbps)
- New calendaring system for smoother surface
- Enhanced binder system improves particle adhesion by 30%
- Double recording time indication (525i/625i)



Applicable Models

MSW-970P
MSW-M2000P/1
MSW-A2000P/1
MSW-2000
MSW-M2100P/1

Specifications

Model	Playing time (min.)
BCT-6MX	7
BCT-12MX	14
BCT-22MX	26
BCT-32MX	38
BCT-60MX	71
BCT-64MXL	76
BCT-94MXL	112
BCT-124MXL	148
BCT-184MXL	220
BCT-HD12CL	12

BCT-D Series Digital Betacam Tape

Small / Large / Cleaning

Since its launch in 1994, the Digital Betacam format has become the worldwide standard for high quality SD broadcast production.

Features

- Ultra-fine magnetic particles for high output
- High-performance binder increases output
- Specially developed lubricant increases head contact and reduces headwear
- Designed for long-term playback reliability
- Low-shrinkage for archival stability



Applicable Models

J-30
J-30/SDI
DVW-970P
DVW-M2000
DVW-M2000P
DVW-2000
DVW-2000P

Specifications

Model Playing time (min.)	
BCT-D6	6
BCT-D12	12
BCT-D22	22
BCT-D32	32
BCT-D40	40
BCT-D34L	34
BCT-D64L	64
BCT-D94L	94
BCT-D124L	124
BCT-D12CL	12

PHDV Series Digital Master™ Media for HDV

Designed for MiniDV, DVCAM™ or HDV camcorders, DigitalMaster™ is quite simply the ultimate DV tape.

Features

- The only Pro DV tape with two active magnetic layers
- Superior in quality to consumer DV and DVCAM™ tape
- Specially developed lubricant increases head contact and reduces headwear



Applicable Models

HVR-Z1E
HVR-A1E
HVR-V1E
HVR-M15E
HVR-M25E
HVR-1500

Specifications

HDV/DV Recording (min)	
PHDVM-63DM	63
PHDV-64DM	64
PHDV-124DM	124
PHDV-186DM	186
PHDV-276DM	276
PDVM-12CL	12
PDV-12CL	12
DVCAM™ Recording (min)	
PHDVM-63DM	41
PHDV-64DM	42
PHDV-124DM	82
PHDV-186DM	124
PHDV-276DM	184
PDVM-12CL	12
PDV-12CL	12

PDV-ME / PDV-N DVCAM Tape Mini and Standard

Delivering the superior image quality that DV compression affords, Sony DVCAM tape is ideal for both high-quality editing and for low-cost acquisition.

Features

- New metal evaporation process for improved packing density and increased C/N ratio
- DLC protective layer for extra durability
- Up to 184 minutes recording time

Applicable Models

DSR-400PK
DSR-400PL
DSR-450WSPL
DSR-250P/1
DSR-PD170P
DSR-2000AP
DSR-1800AP
DSR-1600AP
DSR-1500AP
DSR-45P
DSR-11
DSR-50P

Specifications

Model	Playing time (min.)
PDVM-12ME	12
PDVM-22ME	22
PDVM-32ME	32
PDVM-40ME	40
PDV-34ME	34
PDV-64ME	64
PDV-94ME	94
PDV-124ME	124
PDV-184ME	184
PDVM-12N	12
PDVM-22N	22
PDVM-32N	32
PDVM-40N	40
PDV-34N	34
PDV-64N	64
PDV-94N	94
PDV-124N	124
PDV-184N	184
PDVM-12CL	12
PDV-12CL	12



SONY

CCA-5 Cables	454
CCA-7 Cables	454
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CCF Cables	455
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CCXC-12P Cables	458
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CCXC-9DB Cable	458
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CCXC-9DD Cable	459
CCXC-T20 Cables	459
CCZ-A Cables	460
RCC-5AA Cable	460
RCC-G Cable	461
RCC-R Cable	462
VMC-IL44 Cables	462
VMC-IL46 Cables	463
VMC-IL66 Cables	463

CCA-5 Cables 8-pin/8-pin Remote Control Cable

CCA-5-30/1
CCA-5-10
CCA-5-3

Features

- Remote control cable for 700 series control panels

Applicable Models

HDCU-1000/1500 Camera Control Unit
CCU-790P/590P Camera Control Unit
RCP-700/701/750/751 Remote Control Panels
MSU-900/MSU-950 Master Setup Unit

Specifications

CCA-5-10: 10m (33ft)
CCA-5-3: 3m (10ft)
CCA-5-30/1 30m

CCA-7 Cables 10-pin/10-pin Cable

CCA-7-25
CCA-7-5
CCA-7-50

Features

- 10-pin (male) / 10-pin (female) • RM-M7G / DXC-D35/300/327B series • RM-M7G / CCU-M7/M5 • RM-M7G / CA-325A/325B

Applicable Models

RCP-D50 Remote Control Panel (Joystick Type)
RCP-D51 Remote Control Panel (Dial Control Type)

Specifications

CCA-7-5: 5 m (16.5 ft)
CCA-7-25: 25 m (82 ft)
CCA-7-50: 50 m (165 ft)
CCA-7-100: 100 m (330 ft)

CCDC Cables 12-pin/4-pin DC Cables

CCDC-10
CCDC-100
CCDC-25
CCDC-5
CCDC-50

Features

- 12-pin (female) <-> 4-pin (male)
- DXC-390/990 Series <-> CMA-D2

Applicable Models

DXC-390 3-CCD Colour Video Camera
DXC-390P 3-CCD Colour Video Camera
DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera

Specifications

CCDC-5: 5 m (16.4 ft)
CCDC-10: 10 m (32 ft)
CCDC-25: 25 m (82 ft)



CCDC-A Cables 12-pin/4-pin Cable

CCDC-100A
CCDC-50A

Features

- 12-pin (female) / 4-pin (male) •DXC-390 / CMA-D2

Applicable Models

DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera

Specifications

CCDC-50A: 50 m (164 ft)
CCDC-100A: 100 m (330 ft)



CCF Cables Hybrid Fibre cables

CCF-100
CCF-200
CCF-300

Features

- Hybrid fibre cables for HDC-1500 camera family

Applicable Models

HDC-1000
HDC-1500
HDC-3300
HDCU-1000
HDCU-1500
HDCU-3300

Specifications

CCF-100: 100m
CCF-200: 200m
CCF-300: 300m

CCFC-M100 Cable Optical Fibre Cable

CCFC-M100

Applicable Models

BRC-300 3-CCD Colour Video Camera
BRU-300 Optical Multiplex Unit

Specifications

Cable length: Approx. 100 m



CCFC-M100HG Cable HD Optical Fibre Cable

CCFC-M100HG

Applicable Models

BRC-H700 HD 3-CCD Colour Video Camera

Specifications

Cable length: Approx. 100 m



CCFD-L Cable DV Cable (6-pin to 4-pin)

CCFD-3L

Features

6-pin to 4-pin

Applicable Models

- | | |
|-----------------------------|----------------------------------|
| DSR-11 Recorder | DSR-DR1000AP Video Disc Recorder |
| DSR-1500AP Editing Recorder | DSR-25 Recorder |
| DSR-1600AP Editing Player | DSR-45AP Recorder |
| DSR-1800AP Editing Recorder | DSR-400PK DVCAM Camcorder |
| DSR-2000AP Editing Recorder | DSR-400PL DVCAM Camcorder |
| DSR-250P/1 DVCAM Camcorder | DSR-450WSPL DVCAM Camcorder |
| DSR-50P Portable Recorder | HVR-Z1E HDV Camcorder |
| | HVR-M10E HDV Recorder |
| | PDW-510P XDCAM Camcorder |
| | PDW-530P XDCAM Camcorder |
| | PDW-F330 XDCAM HD Camcorder |
| | PDW-F350 XDCAM HD Camcorder |

CCF-L Cable DV Cable (6-pin to 6-pin)

CCF-3L

Features

6-pin to 6-pin

Applicable Models

- DSR-1500AP Editing Recorder
DSR-1600AP Editing Player
DSR-1800AP Editing Recorder
DSR-2000AP Editing Recorder
DSR-250P/1 DVCAM Camcorder
DSR-50P Portable Recorder
DSR-DR1000AP Video Disc Recorder
DSR-400PK DVCAM Camcorder
DSR-400PL DVCAM Camcorder
DSR-450WSPL DVCAM Camcorder
PDW-510P XDCAM Camcorder
PDW-530P XDCAM Camcorder
PDW-F330 XDCAM HD Camcorder
PDW-F350 XDCAM HD Camcorder



CCMC-3MZ Cable

CCMC-3MZ

Features

For connection of CMA-D3/D3CE, capable of connecting to the CCZ-A2/A5/A10/A25/A50/A100 cables (3 m)

Applicable Models

DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera

CCMC-9DS Cable 9-pin/4BNCs, DIN 4-pin

CCMC-9DS

Features

- 9-pin D-sub (male) <> BNCs (R/G/B/SYNC, male), DIN 4-pin (Y/C, male) • 5 m (16.4 ft) • For video output from DXC-390/990

Applicable Models

BRC-300 3-CCD Colour Video Camera
DXC-390 3-CCD Colour Video Camera
DXC-390P 3-CCD Colour Video Camera
DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera
DXC-C33 3-CCD Colour Video Camera
DXC-C33P 3-CCD Colour Video Camera



CCT Cables Triax Cable

CCT-100

CCT-150

CCT-300

CCT-50

Features

- BVP-E30 series to CCU-790P or CCU-590P
- DXC-D50 series to CCU-TX50P

Specifications

CCT-50: 50 m (164 ft)
CCT-100: 100 m (328 ft)
CCT-150: 150 m (492 ft)
CCT-300: 300 m (984 ft)

CCXC-12P Cables 12-pin/12-pin Multi Core Cables

CCXC-12P05N
CCXC-12P10N
CCXC-12P25N

Features

12-pin (male) <> 12-pin (female)

•DXC-390/990 Series <> CMA-D2

Applicable Models

DXC-390 3-CCD Colour Video Camera
DXC-390P 3-CCD Colour Video Camera
DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera

Specifications

CCXC-12P05N: 5 m (16.4 ft)
CCXC-12P10N: 10 m (33 ft)
CCXC-12P25N: 25 m (82 ft)



CCXC-6P Cable Trigger Cable

CCXC-6P05

Features

Trigger Cables

CCXC-9DB Cable 9-pin/9-pin Cable

CCXC-9DB

Features

RGB Cable, 9-pin male - 5 m

Applicable Models

DXC-C33 3-CCD Colour Video Camera
DXC-C33P 3-CCD Colour Video Camera

CCXC-9DBS Cable 9-pin/5BNCs Cable

CCXC-9DBS

Features

- 9-pin D-sub (male) <—> BNCs (R/G/B/SYNC/VBS) (male) •5m (16.4 ft) •For video output from DXC-950/950P/390/390P

Applicable Models

BRC-300 3-CCD Colour Video Camera
DXC-390 3-CCD Colour Video Camera
DXC-390P 3-CCD Colour Video Camera
DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera



CCXC-9DD Cable 9-pin/9-pin Cable

CCXC-9DD

Features

- 9-pin D-sub (male) <—> 9-pin D-sub (male) •5m (16.4 ft)
- For video output from DXC-950/950P/390

Applicable Models

DXC-990 3-CCD Colour Video Camera
DXC-990P 3-CCD Colour Video Camera
DXC-C33 3-CCD Colour Video Camera
DXC-C33P 3-CCD Colour Video Camera

CCXC-T20 Cables ccu to CHU cables

CCXC-T20P02

CCXC-T20P05

CCXC-T20P10

Specifications

CCXC-T20P02: 2 m
CCXC-T20P05: 5 m
CCXC-T20P10: 10 m

CCZ-A Cables 26-pin/26-pin Cable

CCZ-A10
CCZ-A100
CCZ-A2
CCZ-A25
CCZ-A5
CCZ-A50

Features

- 26-pin (male) <—> 26-pin (female)
- DXC-D50P/D50WSP series <—> CCU-M50P



Applicable Models

CA-D50 Camera Adaptor
CCU-D50 Camera Control Unit
CCU-D50P Camera Control Unit
DXC-390 3-CCD Colour Video Camera
DXC-390P 3-CCD Colour Video Camera
DXC-D50PH 3-chip CCD Portable Colour Camera
DXC-D50PK 3-chip CCD Portable Colour Camera
DXC-D50PL 3-chip CCD Portable Colour Camera
DXC-D50WSPL 3-chip CCD Portable Colour Camera
DXC-H10 3-CCD Colour Video Camera

Specifications

CCZ-A2: 2m (6.5 ft)
CCZ-A5: 5m (16.5 ft)
CCZ-A10: 10m (33 ft)
CCZ-A25: 25m (82 ft)
CCZ-A50: 50m (164 ft)
CCZ-A100: 100m (330 ft)

RCC-5AA Cable 9-pin/15-pin Audio mixer control cable

RCC-5AA

Features

- 9-pin (male) <—> 15-pin (female), 5m (16ft)
- PVE-500 <—> MXP-290



RCC-G Cable 9-pin/9-pin Cable

RCC-5G

Features

- 9-pin (male) <—> 9-pin (male)



Applicable Models

DSR-45AP Recorder
 DSR-1500AP Editing Recorder
 DSR-1600AP Editing Player
 DSR-1800AP Editing Recorder
 DSR-2000AP Editing Recorder
 DSR-DR1000AP Video Disc Recorder
 DVW-2000 Digital Betacam Recorder
 DVW-2000P Digital Betacam Recorder
 DVW-M2000 Digital Betacam Recorder
 DVW-M2000P Digital Betacam Recorder
 HDW-1800 HDCAM VTR
 HDW-D1800 HDCAM VTR
 HDW-2000 HDCAM VTR
 (all versions including /20)
 HDW-M2000 HDCAM VTR
 (all versions including /20)
 HDW-M2000P HDCAM VTR
 (all versions including /20)
 HDW-D2000 HDCAM VTR
 (all versions including /20)
 HDW-M2100 HDCAM Player
 (all versions including /20)
 HDW-M2100P HDCAM Player
 (all versions including /20)
 MSW-2000 MPEG IMX Recorder
 (all versions including /1)
 MSW-A2000 MPEG IMX Recorder
 (all versions including /1)
 MSW-A2000P MPEG IMX Recorder
 (all versions including /1)
 MSW-M2000 MPEG IMX Recorder
 (all versions including /1)
 MSW-M2000P MPEG IMX Recorder
 (all versions including /1)
 MSW-M2100 MPEG IMX Player
 (all versions including /1)
 MSW-M2100P MPEG IMX Player
 (all versions including /1)
 PC-3000 Signal Interface Switcher
 PDW-1500 XDCAM Compact Deck
 (Recording and Playback)
 PDW-F70 XDCAM HD Recording Deck
 PDW-F30 XDCAM HD Viewing Deck
 PDW-R1 XDCAM Field Recorder

Specifications

RCC-5G: 5 m (16 ft)

RCC-R Cable Cascade Connection Cable

RCC-5R

Specifications
RCC-5R: 5m (16.4 ft)

VMC-IL44 Cables 4-pin <-> 4-pin i.LINK Cable

VMC-IL4415
VMC-IL4435

Applicable Models
DSR-11 Recorder
DSR-25 Recorder
DSR-45AP Recorder
DSR-PD170P DVCAM Camcorder
HVR-Z1E HDV Camcorder
HVR-A1E HDV Camcorder
HVR-M10E HDV Recorder

Specifications
VMC-IL4415: 1.5 m(5 ft)
VMC-IL4435: 3.5 m(12 ft)



VMC-IL4415

VMC-IL46 Cables 4-pin <-> 6-pin i.LINK Cable

VMC-IL4615
VMC-IL4635



VMC-IL4615

Applicable Models

DSR-11 Recorder
DSR-25 Recorder
DSR-250P/1 DVCAM Camcorder
DSR-45AP Recorder
DSR-50P Portable Recorder
DSR-PD170P DVCAM Camcorder
DXC-C33 3-CCD Colour Video Camera
DXC-C33P 3-CCD Colour Video Camera
HVR-Z1E HDV Camcorder
HVR-A1E HDV Camcorder
HVR-M10E HDV Recorder
PDW-1500 XDCAM Compact Deck
(Recording and Playback)
PDW-510 XDCAM Camcorder
(DVCAM Recording)
PDW-510P XDCAM Camcorder
(DVCAM Recording)
PDW-530 XDCAM Camcorder
(MPEG IMX/DVCAM Recording)

PDW-530P XDCAM Camcorder
(MPEG IMX/DVCAM Recording)
PDW-F70 XDCAM HD Recording Deck
PDW-F30 XDCAM HD Viewing Deck
PDW-R1 XDCAM Field Recorder
PDW-D1 XDCAM Drive Unit
PDW-V1 XDCAM Mobile Deck
(Playback and File Recording)
PDW-F330 XDCAM HD Camcorder
PDW-F350 XDCAM HD Camcorder

Specifications

VMC-IL4615: 1.5 m (5 ft)
VMC-IL4635: 3.5 m (12 ft)

VMC-IL66 Cables 6-pin <-> 6-pin i.LINK Cable

VMC-IL6615
VMC-IL6635



VMC-IL6615

Applicable Models

DSR-250P/1 DVCAM Camcorder
DSR-50P Portable Recorder
DXC-C33 3-CCD Colour Video Camera
DXC-C33P 3-CCD Colour Video Camera
PDW-1500 XDCAM Compact Deck
(Recording and Playback)
PDW-510 XDCAM Camcorder
(DVCAM Recording)
PDW-510P XDCAM Camcorder
(DVCAM Recording)
PDW-530 XDCAM Camcorder
(MPEG IMX/DVCAM Recording)
PDW-530P XDCAM Camcorder
(MPEG IMX/DVCAM Recording)
PDW-F70 XDCAM HD Recording Deck
PDW-F30 XDCAM HD Viewing Deck
PDW-R1 XDCAM Field Recorder
PDW-D1 XDCAM Drive Unit
PDW-V1 XDCAM Mobile Deck
(Playback and File Recording)
PDW-F330 XDCAM HD Camcorder
PDW-F350 XDCAM HD Camcorder

Specifications

VMC-IL6615: 1.5 m(5 ft)
VMC-IL6635: 3.5 m(12 ft)

SONY

2NP-F970/B214
2NP-QM91D/B214

A

AC-DN10200
AC-DN2B200
AC-SQ950B201
AC-VQ1050B201
ACID Pro 6292
AD-C77330
AD-C77B330
AD-C88328
AD-KIT77328
AD-KIT88327
AD-KIT88B326
AD-R44B331
AD-R55B331
AD-R66B330
AD-R77B330
AD-R88B328
AN-820A334
AWS-G500236

B

BC-L500204
BC-L70203
BC-M150202
BCT-D Series450
BCT-HD Series449
BCT-MX Series449
BCT-SR Series448
BKAU-550237
BKAU-570237
BKDF-810239
BKDF-811239
BKDF-840239
BKDF-860239
BKDF-861239
BKDS-9160255
BKDS-9161255
BKDS-9162255
BKDS-9210255
BKDS-9470256
BKDW-101220
BKM-14L420
BKM-15R420
BKM-220D421
BKM-243HS421
BKM-255DV422
BKM-30E14422
BKM-30E20422
BKM-320D423
BKM-35H423
BKM-61D423
BKM-62HS424
BKM-68X424
BKM-FW10394
BKM-FW11394

BKM-FW12394
BKM-FW32394
BKM-FW50393
BKMW-101220
BKMW-102220
BKMW-103221
BKMW-104221
BKMW-E3000222
BKP-905738
BKP-L551223
BP-GL65205
BP-GL95206
BP-L60S207
BP-L80S207
BRBK-30139
BRBK-30239
BRBK-30339
BRBK-30439
BRBK-H70039
BRC-30026
BRC-H70028
BRU-30040
BRU-H70040
BVF-20WCE41
BVF-55CE41
BVF-77CE42
BVM-A14F5M400
BVM-A20F1M399
BVM-A32E1WM398
BVP-E30P14
BVP-E30WSP15
BZDM-9050266
BZPS-8000260
BZPS-8001261
BZS-2000M246
BZS-2440M246
BZS-2470M246
BZS-8050286
BZS-8250259
BZS-9250259
BZS-9471256
BZSQ-C001380
BZSQ-C101380
BZSQ-M001383
BZSQ-M101383
BZSQ-T050382
BZSQ-V001384
BZSQ-V101384

C

CA-55343
CA-590P43
CA-905F44
CA-D5045
CA-TX50P46
CA-WR85547
CAC-1248
CAC-448

CB-LP1NL396
CBK-FC01208
CBK-FC01167
CBK-MB01208
CBK-NC01209
CBK-NC01167
CBK-PC01209
CBK-PC01168
CBK-SC01208
CBK-SC01167
CBK-SD01208
CBK-SD01168
CCA-5 Cables454
CCA-7 Cables454
CCDC Cables454
CCDC-A Cables455
CCF Cables455
CCF-L Cable456
CCFC-M100 Cable455
CCFC-M100HG Cable455
CCFD-L Cable456
CCMC-3MZ Cable457
CCMC-9DS Cable457
CCT Cables457
CCU-590P49
CCU-790P50
CCU-D50P51
CCU-TX50P52
CCXC-12P Cables458
CCXC-6P Cable458
CCXC-9DB Cable458
CCXC-9DBS Cable459
CCXC-9DD Cable459
CCXC-T20 Cables459
CCZ-A Cables460
CD Architect 5.2296
Cinescore291
CMA-D253
CMA-D2MDCE54
CMA-D3CE55
CNU-70056
CU-E672334
CU-E700335
CU-F117335
CU-F780336
CU-G780336

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DC-78304
DFS-800238
DMX-P01300
DSBK-1501223
DSBK-1505223
DSBK-1601223
DSBK-1801224
DSBK-1820224
DSBK-2020224
DSR-11149

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DSR-1600AP	144	F-780	325	HKSR-5001/1	130
DSR-1800AP	142	FS-LP1NL	396	HKSR-5002	130
DSR-2000AP	140	FWD-32LX2F S/B	388	HKSR-5003	130
DSR-250P/1	136	FWD-40LX2F S/B	389	HVL-20DW2	211
DSR-400PK	134	FWD-42PV1 S/B	390	HVL-F10	211
DSR-400PL	135	FWD-42PX2 S/B	391	HVL-FH1100	212
DSR-450WSPL	132	FWD-50PX2 S/B	392	HVR-A1E	80
DSR-45AP	148			HVR-M15E	82
DSR-50P	150			HVR-M25E	83
DSR-DR1000AP	151			HVR-Z1E	78
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DVW-970P	174	HDC-X300K	2	K	
DVW-M2000	176	HDC-X310	3	K-1334	337
DVW-M2000P	178	HDC-X310K	3		
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DXC-990P	32	HDCU-1500	9	LC-777	212
DXC-C33P	34	HDCU-3300	10	LC-DN7	212
DXC-D50PH	16	HDFX-100	11	LC-DS300SFT	61
DXC-D50PK	18	HDLA-1500	11	LC-H300	61
DXC-D50PL	20	HDLA-1505	11	LC-HB330	61
DXC-D50WSPL	22	HDTX-100	11	LCH-FXA	212
DXF-20W	56	HDVF-C30W	58	LCH-TRV950	212
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ECM-322BMP	306	HDXchange	230	LMD-212	403
ECM-44B	307	HFBK-HD1	59	LMD-232W	401
ECM-44BC	308	HFBK-SD1	59	LMD-4420	418
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ECM-66B	312	HK-PSU04	261	LMD-9030	412
ECM-673	313	HK-PSU11	241	LMD-9050	410
ECM-674	314	HKC-T1500	12	LO-23	62
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ECM-77B	316	HKCU-1003	60	LO-32BMT	213
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ECM-77BMP	318	HKDW-101	225	M	
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MB-528	.428	MKS-8111SD	.257	QUALIA 004	.441
MB-8N	.339	MKS-8160A	.257	R	
MB-X6	.338	MKS-8161M	.258	RCC-5AA Cable	.460
MDR-7502	.374	MKS-8162A	.258	RCC-G Cable	.461
MDR-7505	.375	MKS-8170M	.258	RCC-R Cable	.462
MDR-7506	.376	MKS-8210A	.258	RCP-700	.65
MDR-7509HD	.377	MKS-8440A	.258	RCP-701	.65
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MEU-WX2	.405	MKS-8701	.267	RCP-751	.66
MFS-2000	.240	MKS-8702	.267	RCP-D50	.67
MKE-8020A	.263	MKS-9011A	.283	RCP-D51	.67
MKE-8021A	.263	MKS-9012A	.284	RM-1BP	.215
MKE-8040A	.263	MSDW-903	.213	RM-280	.227
MKE-9020M	.265	MSDW-904	.213	RM-B150	.215
MKE-9021M	.265	MSU-900	.63	RM-B750	.216
MKE-9040M	.265	MSU-950	.64	RM-BR300	.68
MKS-2010	.242	MSW-2000	.194	RM-C950	.68
MKS-2015	.243	MSW-970P	.188	RMM-131	.227
MKS-2017	.244	MSW-A2000P/1	.192	RMM-301	.68
MKS-2050	.286	MSW-M2000P/1	.190	S	
MKS-2110M	.245	MSW-M2100P/1	.196	SAD-88B	.327
MKS-2420M	.245	MVE-8000A	.262	SAD-H44B	.331
MKS-2440	.245	MVE-9000	.264	SAD-H55B	.331
MKS-2470	.245	MVS-8000A	.247	SAD-H77B	.329
MKS-2700	.267	MVS-8000ASF	.249	SAD-H88B	.326
MKS-8010A	.268	N		SAD-P88	.327
MKS-8011A	.268	NP-F570	.214	SAD-S77	.329
MKS-8013A	.269	NP-F770	.214	SAD-S88B	.327
MKS-8014A	.269	NP-QM91D	.215	SAD-V77B	.329
MKS-8015A	.270	NSP-1	.386	SAD-V88B	.326
MKS-8017A	.270	P		SAD-W77B	.329
MKS-8018A	.271	PDBK-101	.226	SAD-W88B	.328
MKS-8019A	.271	PDBK-102	.226	SAD-W88BL	.326
MKS-8020A	.272	PDBK-103	.226	SMF-600	.428
MKS-8024A	.273	PDBK-104	.226	SMF-700	.428
MKS-8025MS	.273	PDJ-A640	.170	Sonaps	.231
MKS-8026A	.274	PDJ-C1080	.169	Sound Forge 8	.294
MKS-8027A	.274	PDJ-CS10	.172	SRP-X500P	.302
MKS-8028A	.275	PDV-ME / PDV-N	.451	SRP-X700P	.301
MKS-8030A	.275	PDW-1500	.162	SRPC-1	.122
MKS-8031AJS	.276	PDW-510	.154	SRW-1	.124
MKS-8031ATB	.276	PDW-510P	.156	SRW-5000/1	.126
MKS-8032A	.277	PDW-530	.158	SRW-5500/1	.128
MKS-8033A	.277	PDW-530P	.160	SRX-R105CE	.444
MKS-8034ADK	.278	PDW-D1	.164	SRX-R110CE	.444
MKS-8034AFB	.278	PDW-F30	.94	SRX-S105	.445
MKS-8035A	.279	PDW-F330K	.88	SRX-S110	.445
MKS-8040A	.279	PDW-F330L	.86	SS-SP32FW/40FW/42FW	.395
MKS-8041A	.280	PDW-F350L	.90	SS-SP50FW	.395
MKS-8050	.286	PDW-F70	.92	SU-32/42FW	.395
MKS-8075	.280	PDW-R1	.166	SU-50FW	.395
MKS-8076	.281	PDW-V1	.165	SU-558	.429
MKS-8080	.281	PetaSite	.234	SU-559	.429
MKS-8082	.282	PHD23A Disc	.448	SWC-5002	.285
MKS-8110M	.256	PHDV Series	.450		
MKS-8110SD	.257				

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SWC-5010	.285

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UWP-C3/67	.349
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VCL-0737W	.217
VCL-616WEA	.69
VCL-HG0872	.217
VCS-700	.70
VCT-14	.217
VCT-FXA	.218
VCT-PG11RMB	.218
VCT-U14	.71
Vegas + DVD	.288
VF-509	.429
VF-72CPK	.218
VFH-550	.72
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WD-850A	.358
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WLL-RX55	.75
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WRR-855B/67	.360
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HDC-1500	5
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HDC-3300	7
HDCU-1000	8
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HDCU-3300	10
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HDFX-100	11
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CA-590P	43
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CCU-790P	50

CCU-D50P	51
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CMA-D2MDCE	54
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HFBK-HD1	59
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